

Supplemental material for “A large multi-ethnic genome-wide association study of body mass index identifies novel loci”

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List of Tables

1	Ancestry association.	2
2	BMI by ethnicity/nationality for GERA.	3
3	Extended novel GERA results and the replication in GIANT.	4
4	Previously known BMI loci	5
5	SNPs GWAS significant in the meta-analysis of GERA and GIANT.	23
6	Conditional SNPs	28
7	Sex heterogeneity tests	29
8	Age heterogeneity tests	34
10	BMI-associated variants annotation.	39
11	BMI x age pairwise heritability interactions.	42

List of Figures

1	Age- and sex-adjusted BMI distribution in GERA ethnicity groups.	43
2	BMI Manhattan and Q-Q plots	50
3	Locus plots.	51
4	GIANT Manhattan imputed SNPs.	52
5	Effect size comparisons amongst GERA, GIANT, and UKB.	53
6	Dominance Q-Q plot	54
7	Epistasis Q-Q plot	55
8	Sex effect size differences	56
9	Sex effect size differences Q-Q plot.	57
10	Age differences Q-Q plot.	58

Table S1. Ancestry association. Regression coefficients include the interpretable ancestry PCs to shed the ancestry effects in the dataset, which were divided by their standard deviation (i.e., Z-score). See Banda 2015 et al. for the PCs and ancestry interpretation of the PCs.

(a) Non-Hispanic whites, using all individuals.

	Eff	P
Age	0.38	10e-509
Age squared	-0.0033	10e-634
Female	-0.68	10e-76
PC1	0.31	10e-72
PC2	-0.28	10e-45

(b) Non-Hispanic whites, with Ashkenazi's removed, and with an Ashkenazi ancestry covariate. PC₁ represents the Southeast (negative PC₁) to North European (positive PC₁) ancestry cline, PC₂ Southwest (negative) to Northeast (positive) European.

	Eff	P
Age	0.38	10e-510
Age squared	-0.0033	10e-635
Female	-0.69	10e-76
PC1	-0.17	7.7e-11
PC2	-0.12	4.5e-10
ASHK	-1.7	10e-45
PC1:PC2	0.09	0.00031

(c) Latinos. PC₁ is Native American (negative PC₁) to European (positive PC₁) ancestry, PC₂ African (negative PC₂) to European (positive PC₂).

	Eff	P
Age	0.32	10e-29
Age squared	-0.003	10e-33
Female	-0.37	0.0045
PC1	-0.36	3.2e-06
PC2	0.023	0.76
Central South America	-1.3	1.4e-07
Mexican	0.047	0.77
Puerto Rican	0.56	0.25
Cuban	0.68	0.47
Latino and African American	0.61	0.28

(d) East Asian. PC₁ amount of European ancestry (negative PC₁) vs. Asian (positive PC₁), PC₂ is Southern (negative PC₂) to Northern (positive PC₂) East Asian ancestry.

	Eff	P
Age	0.24	10e-46
Age squared	-0.0022	10e-50
Female	-1.6	10e-58
EaPC1	-1.2	10e-67
EaPC2	-0.36	5.2e-11
EaPC2 ²	0.57	10e-35
EaPC1 × EaPC2	0.42	0.00038

(e) African American. PC₁ is European (negative PC₁) to African (positive PC₁), PC₂ amount of East Asian (positive PC₁) ancestry.

	Eff	P
Age	0.48	10e-36
Age squared	-0.0044	10e-43
Female	1.6	3.8e-14
AfPC1	0.63	2.7e-09
AfPC2	-0.079	0.34

(f) South Asian.

	Eff	P
Age	0.39	0.0071
Age squared	-0.0029	0.0059
Female	-0.053	0.92
PC1	-0.52	0.0067
PC2	0.19	0.25

Table S2. BMI by ethnicity/nationality for GERA. Mean and 95% confidence intervals are given for raw BMI values and for age and sex-adjusted BMI residuals.

Group	N	BMI	Age and Sex-adjusted BMI
Non-Hispanic whites	81377	27.6 (27.6, 27.7)	-0.12 (-0.16, -0.08)
- Excluding Ashkenazi	76143	27.7 (27.7, 27.7)	-0.04 (-0.08, 0.00)
- Ashkenazi $\geq 50\%$	5194	26.5 (26.4, 26.7)	-1.28 (-1.42, -1.15)
- Ashkenazi 100%	3643	26.4 (26.2, 26.5)	-1.45 (-1.60, -1.30)
- Ashkenazi 75%	119	26.5 (25.6, 27.4)	-1.29 (-2.23, -0.35)
- Ashkenazi 50%	1432	26.9 (26.6, 27.2)	-0.86 (-1.14, -0.57)
Latino	8322	28.8 (28.8, 28.8)	1.08 (0.95, 1.20)
- Central South America	612	27.8 (27.4, 28.2)	0.08 (-0.32, 0.47)
- Cuba	40	28.4 (26.7, 30.1)	0.56 (-1.13, 2.25)
- Mexican	3048	29.2 (29.0, 29.4)	1.40 (1.20, 1.60)
- Puerto Rican	148	29.1 (28.2, 30.0)	1.36 (0.47, 2.24)
- Latino + African American	112	29.6 (28.5, 30.7)	0.19 (-8.22, 8.61)
East Asians without Indo-Fijians	7235	25.2 (25.1, 25.3)	-2.57 (-2.67, -2.48)
- Chinese	2892	24.2 (24.1, 24.3)	-3.59 (-3.72, -3.46)
- Filipino	1259	26.3 (26.1, 26.5)	-1.46 (-1.69, -1.23)
- Japanese	1363	25.3 (25.1, 25.5)	-2.46 (-2.69, -2.24)
- Korean	174	24.0 (23.5, 24.6)	-3.51 (-4.04, -2.98)
African Americans	3069	30.2 (30.0, 30.4)	2.41 (2.18, 2.63)
South Asians	459	25.6 (25.2, 26.0)	-2.27 (-2.62, -1.92)

Table S3. Extended novel GERA results and the replication in GIANT. Chr, chromosome; Pos, Position; Allele, coded effect allele/other allele; Info, Impute2 imputation r^2 quality; Frq, frequency of effect allele; Eff, effect size.

SNP	Chr	Pos	Allele	Group	Info	Frq	Eff	P	I ²	hetp
rs144839874	2	194880111	A/G	GERA Non-Hispanic white	.67	.013	-.140	4.3e-8		
				GERA Latino	.72	.007	-.136	.23		
				GERA East Asian	.53	.001	.338	.48		
				GERA African American	.3	.003				
				GERA South Asian	.82	.010	.212	.56		
				GERA Meta			-.139	2e-8	.00	.97
				GIANT	.26	.987				
				UKB Non-Hispanic white	.82	.006				
				UKB Mixed/Other	.64	.003				
				UKB South Asian	.63	.003				
				UKB East Asian	.028	.000				
				UKB African American	.74	.002				
				GIANT+UKB Meta			-.004	.82	1	
				GERA+GIANT+UKB Meta			-.042	.0017	77.88	.0004
chr3:77646862:D	3	77646862	TG/T	GERA Non-Hispanic white	.98	.599	-.025	3.2e-7		
				GERA Latino	.96	.588	-.027	.099		
				GERA East Asian	.95	.619	-.037	.026		
				GERA African American	.95	.671	-.016	.58		
				GERA South Asian	.96	.617	-.082	.21		
				GERA Meta			-.026	4.7e-9	.00	.85
				GIANT	.99	.401	-.011	.0022		
				UKB Non-Hispanic white	.92	.593	-.012	1e-7		
				UKB Mixed/Other	.9	.643	-.002	.89		
				UKB South Asian	.82	.624	-.026	.12		
				UKB East Asian	.84	.665	.061	.12		
				UKB African American	.85	.706	-.027	.15		
				GIANT+UKB Meta			-.012	3.6e-10	4.74	.39
				GERA+GIANT+UKB Meta			-.014	6.7e-16	33.41	.13
rs828758	5	162351852	G/A	GERA Non-Hispanic white	.99	.435	.023	1.4e-6		
				GERA Latino	.99	.482	.036	.02		
				GERA East Asian	.99	.450	.007	.68		
				GERA African American	.98	.378	.073	.0056		
				GERA South Asian	.98	.415	-.101	.12		
				GERA Meta			.024	4.4e-8	55.05	.064
				GIANT	.98	.565	.006	.12		
				UKB Non-Hispanic white	1	.449	.005	.018		
				UKB Mixed/Other	1	.415	-.012	.46		
				UKB South Asian	1	.425	-.003	.85		
				UKB East Asian	.97	.476	-.061	.071		
				UKB African American	.96	.367	.006	.73		
				GIANT+UKB Meta			.005	.01	3.17	.4
				GERA+GIANT+UKB Meta			.008	6.9e-6	67.08	.00074
rs513357	6	69558698	A/G	GERA Non-Hispanic white	1	.892	-.035	5.3e-6		
				GERA Latino	.98	.830	-.050	.018		
				GERA East Asian	1	.744	-.037	.042		
				GERA African American	.96	.899	-.028	.52		
				GERA South Asian	1	.732	.021	.78		
				GERA Meta			-.036	4.4e-8	.00	.9
				GIANT	1	.925	-.003	.7		
				UKB Non-Hispanic white	1	.883	-.015	1.6e-5		
				UKB Mixed/Other	1	.855	-.024	.31		
				UKB South Asian	1	.783	-.001	.98		
				UKB East Asian	1	.727	-.019	.61		
				UKB African American	1	.898	.023	.37		
				GIANT+UKB Meta			-.011	9.8e-5	4.81	.39
				GERA+GIANT+UKB Meta			-.015	7.8e-9	44.82	.053
rs7938308	11	13320533	C/T	GERA Non-Hispanic white	.97	.262	-.025	6.7e-6		
				GERA Latino	.95	.315	-.056	.00098		
				GERA East Asian	.99	.475	-.036	.024		
				GERA African American	.91	.444	-.003	.92		
				GERA South Asian	.94	.293	.098	.18		
				GERA Meta			-.027	2.7e-8	43.67	.13
				GIANT	.97	.738	-.010	.013		
				UKB Non-Hispanic white	.99	.269	-.014	4.4e-9		
				UKB Mixed/Other	1	.334	.001	.95		
				UKB South Asian	.99	.298	.001	.93		
				UKB East Asian	.96	.496	-.033	.33		
				UKB African American	.92	.462	.023	.16		
				GIANT+UKB Meta			-.012	1e-9	32.17	.19
				GERA+GIANT+UKB Meta			-.014	8.1e-15	55.25	.013
rs78085088	12	59682970	G/A	GERA Non-Hispanic white	.66	.039	.080	1.4e-7		
				GERA Latino	.93	.021	.109	.047		
				GERA East Asian	.58	.003	.216	.29		
				GERA African American	.5	.009	.431	.022		
				GERA South Asian	.45	.015	.989	.0095		
				GERA Meta			.085	5.6e-9	27.00	.25
				GIANT	.46	.961	.010	.29		
				UKB Non-Hispanic white	.94	.031	.001	.91		
				UKB Mixed/Other	.94	.014	.003	.97		
				UKB South Asian	.98	.008				
				UKB East Asian	.77	.000				
				UKB African American	.92	.004				
				GIANT+UKB Meta			.004	.49	.00	.72
				GERA+GIANT+UKB Meta			.013	.0076	81.98	2.1e-6
rs306890	X	154987147	C/T	GERA Non-Hispanic white	1	.247	.051	8.2e-19		
				GERA Latino	1	.337	.043	.0085		
				GERA East Asian	1	.316	.045	.01		
				GERA African American	1	.188	.057	.081		
				GERA South Asian	1	.373	.028	.67		
				GERA Meta			.050	2.1e-22	.00	.98
				GIANT						
				UKB Non-Hispanic white	.14	.266				
				UKB Mixed/Other	.15	.258				
				UKB South Asian	.11	.284				
				UKB East Asian	.15	.263				
				UKB African American	.18	.185				
				GIANT+UKB Meta			.016	.011	.00	.91
				GERA+GIANT+UKB Meta			.036	5.6e-20	52.60	.025

Table S4. Previously known BMI loci.

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta								
				Info	Frq	P	Info	Frq	P	Info	Frq	P	Info	Frq	P	Info	Frq	P	Eff	r ²	Eff	P	Eff	r ²	Het	P							
rs120443597	1	1708801	A/G	Prev .96	.494	-.003	.6	.99	.455	.008	.63	.96	.503	-.010	.56	.97	.827	.017	.6	-.002	.65	.00	.89	-.015	1.4e-6	-.011	2.2e-5	29.16	.22				
rs2803328	1	1874326	C/G	Prev .97	.498	-.002	.65	.98	.480	-.009	.58	.96	.493	-.017	.3	.97	.771	-.004	.88	-.004	.38	.00	.93	-.015	3.4e-6	-.011	1.9e-5	6.83	.37				
rs7533528	1	2444414	C/G	Prev .58	.614	.017	.0076	.94	.697	-.008	.64	.66	.663	-.006	.77	.91	.882	.047	.24	.56	-.726	-.056	.57	-.018	3.2e-5	-.017	1.1e-6	.00	.75				
rs17396340	1	11028616	G/A	Prev .98	.868	.001	.92	.97	.911	-.004	.88	.94	.983	.096	.13	.96	.924	-.019	.82	-.001	.93	.00	.95	-.003	.46	-.003	.51	.00	.48				
rs12711521	1	11029616	C/A	Prev .1	.192	.000	.97	1	.213	.017	.37	1	.316	-.045	.0079	1	.688	.001	.97	-.003	.58	.00	.91	-.014	.0049	-.006	.591	.61	.81				
rs3820071	1	15808767	G/A	Prev .1	.741	.008	.13	1	.704	.040	.019	1	.438	.006	.72	1	.742	.027	.36	-.011	.022	.00	.48	-.013	.0018	-.012	1.3e-5	.00	.61				
rs37666160	1	15808872	G/A	Prev .1	.754	.008	.13	1	.724	.037	.031	1	.460	.007	.65	1	.741	.028	.73	-.012	.024	.00	.52	-.006	.078	-.008	.0064	.00	.79				
rs9435732	1	17308158	C/T	Prev .82	.725	-.014	.02	.99	.661	-.021	.2	.69	.474	.005	.81	.98	.781	.032	.3	.73	.650	-.035	.67	-.006	.078	-.008	.0064	.00	.55				
rs4920605	1	17315425	G/A	Prev .85	.447	-.012	.02	.99	.503	.024	.13	.83	.718	-0.000	.99	.98	.691	.003	.91	.8	.548	-.044	.55	-.007	.06	.009	.0023	.00	.79				
rs3738814	1	17331676	A/G	Prev .88	.569	-0.011	.034	1	.515	-0.017	.27	.9	.285	-0.009	.64	1	.371	.021	.41	.85	-.426	.074	.3	-.010	.031	.00	.0057	-.006	.61				
rs10799790	1	23418153	C/T	Prev .1	.168	.011	.081	1	.328	.022	.18	1	.197	.015	.44	1	.189	-.020	.52	1	.397	-.059	.37	-.011	.044	.00	.62	.020	.0001	.00	.56		
rs3765407	1	23419374	G/T	Prev .1	.169	.010	.13	1	.339	.026	.11	1	.198	.015	.44	1	.376	-.020	.43	1	.399	-.053	.42	.010	.066	.00	.51	.019	.00029	.00	.45		
rs477830	1	23419383	C/T	Prev .1	.169	.010	.13	1	.337	.025	.11	1	.197	.014	.44	1	.332	-.013	.63	1	.402	-.053	.42	.010	.062	.00	.64	.017	.00032	.00	.66		
rs2076463	1	27971092	A/G	Prev .86	.982	-.022	.26	.94	.951	.038	.29	.95	.660	.001	.96	1	.613	.039	.13	.88	.802	.029	.74	.004	.69	14.97	.32	-.002	.89	.00	.44		
rs2271928	1	32127653	G/A	Prev .32	.593	.011	.023	1	.565	.014	.38	.82	.356	.033	.076	1	.511	.029	.24	.88	.593	.005	.95	.008	.096	47.82	.1	.013	1.6e-5	.00	.61		
rs22285560	1	32164206	T/G	Prev .34	.364	-0.009	.13	.96	.373	-.027	.097	.68	.37	-0.07	.73	.95	.246	-.009	.77	.56	.442	-.017	.84	-.011	.041	.00	.89	-.014	.00026	-.013	3.1e-5	.00	.94
rs2228552	1	32165495	G/T	Prev .35	.382	-0.009	.10	1	.449	-.032	.039	.64	.720	-.003	.39	1	.601	-.004	.89	.37	.445	.029	.74	-.011	.045	.00	.66	-.011	.00036	-.013	1.0e-5	.00	.66
rs22260172	1	33853617	A/G	Prev .1	.783	-0.030	1.9e-7	1	.791	-.022	.34	1	.822	-.039	.06	1	.945	-.032	.57	1	.889	.077	.49	-.030	1.9e-8	.00	.86	-.008	.046	-.015	9.5e-7	61.08	.025
rs61779328	1	39953487	A/G	Prev .98	.808	-0.034	3.6e-8	.98	.809	-0.020	.31	.97	.863	-.067	.0045	.94	.930	-.045	.46	.96	.903	.087	.44	-.034	1.2e-9	.00	.46	-.008	.067	-.018	1.6e-7	69.67	.0056
rs2275426	1	46487532	G/A	Prev .99	.558	-0.002	.66	1	.509	.009	.38	.99	.397	.010	.54	.99	.375	-0.015	.57	.99	.546	.008	.9	-.001	.87	.00	.88	-.015	3e-6	.00	.88		
rs1707322	1	46505147	A/G	Prev .1	.292	-0.000	.97	1	.323	.011	.5	.99	.342	.004	.81	1	.364	-.030	.26	1	.388	-.014	.83	.000	1	-.006	.057	-.010	5.6e-6	.00	.12		
rs9777747	1	47684677	T/G	Prev .99	.398	-0.019	.00012	.99	.518	-0.018	.25	.99	.917	-0.015	.61	.98	.647	.031	.24	.99	.520	.013	.84	-.018	5.7e-5	.00	.81	-.017	8.7e-8	.00	.89		
rs3127553	1	49438005	G/A	Prev .1	.367	.019	.00013	.99	.381	.038	.018	.98	.705	.007	.67	.99	.234	-.029	.3	.99	.476	-.061	.32	-.023	1.2e-12	-.021	2.9e-16	30.98	.2	.34			
rs4582848	1	50312200	A/C	Prev .1	.321	.024	3.1e-6	1	.368	.024	.13	1	.705	.005	.75	.99	.455	-.050	.049	.42	.016	.00023	.690	.37	.023	5.6e-13	-.021	4.8e-16	11.11	.34			
rs15683200	1	50359820	C/T	Prev .1	.383	.020	3.1e-5	1	.476	.031	.046	1	.868	.032	.17	1	.687	-.013	.63	1	.518	-.059	.35	.020	5.8e-6	.00	.43	.018	1.5e-8	.00	.54		
rs12140153	1	62579891	G/T	Prev .87	.920	.028	.00025	.85	.953	.043	.28	.81	.993	.070	.5	.81	.978	.172	.066	.81	.966	.088	.64	.031	.00063	.00	.61	.016	.017	-.021	8e-5	.00	.48
rs2481665	1	62594677	T/C	Prev .98	.564	.023	2.5e-6	.97	.694	.024	.15	.96	.961	-.023	.58	.98	.851	.062	.084	.93	.752	.069	.37	-.023	4.3e-7	.00	.6	.016	1.9e-7	.00	.48		
rs11208659	1	657979280	T/C	Prev .99	.909	-0.030	.000026	1	.896	-0.015	.56	.98	.930	.007	.82	.99	.678	.036	.2	.97	.821	-.381	.1e-9	-.025	.00074	82.97	.0001	-.022	1.3e-5	79.02	.00023	.00	.63
rs11209943	1	672705000	A/G	Prev .1	.373	-0.030	1.4e-9	1	.321	-.041	.012	1	.092	-.049	.073	1	.709	.030	.29	1	.339	-.010	.89	-.029	1e-10	28.73	.23	-.032	4.7e-18	-.031	3.7e-27	13.93	.33
rs31013336	1	72751185	T/C	Prev .1	.372	-0.030	1.3e-9	1	.305	-.042	.014	1	.901	-.052	.06	1	.456	.033	.19	1	.338	-.007	.91	-.029	1.7e-10	45.46	.12	-.033	2.7e-26	-.032	7.4e-36	37.24	.16
rs61765650	1	72753112	A/G	Prev .1	.829	.040	2.2e-10	1	.879	.055	.02	.99	.980	.072	.2	1	.924	-.042	.38	.99	.932	.271	.024	.041	1.3e-11	45.32	.12	-.037	1.2e-14	-.038	1.1e-24	34.16	.18
rs2569588	1	72765116	G/A	Prev .1	.372	-0.030	1.1e-9	1	.305	-.043	.01	1	.092	-.046	.089	1	.456	.032	.2	1	.339	-.010	.89	-.029	1.3e-10	43.63	.13	-.033	3.3e-25	-.031	8.6e-35	33.31	.19
rs2815752	1	72812440	C/T	Prev .1	.377	-0.029	2.1e-9	.99	.307	-.042	.014	.99	.092	-.049	.074	.98	.454	.027	.28	1	.337	-.006	.93	-.029	2.3e-10	34.33	.19	-.033	3e-25	-.031	1.5e-34	23.91	.25
rs990871	1	72832713	C/T	Prev .1	.372	-0.030	1.4e-9	.98	.314	-.039	.021	.98	.096	-.054	.045	.97	.494	.024	.36	.99	.346	-.006	.93	-.029	1.2e-10	27.23	.24	-.032	2.8e-25	-.032	2.1e-35	16.34	.31
rs7531118	1	72837239	T/C	Prev .92	.477	-.026	2e-7	.9	.567	-.024	.15	.88	.681	-.025	.17	.91	.848	.023	.52	.88	.698	-.131	.085	-.025	3e-8	.00	.44	-.033	9.7e-25	-.030	3.1e-31	12.38	.34
rs11209951	1	72837490	C/T	Prev .99	.375	-.029	2.1e-10	.98	.307	-.038	.024	.98	.096	-.055	.04	.97	.441	.020	.43	.97	.343	-.001	.99	-.029	1.7e-10	21.39	.28	-.039	1.3e-25	-.032	4e-35	10.55	.35
rs1993709	1	72838529	A/C	Prev .1	.178	-0.038	7.8e-10	.98	1.26	-.051	.03	1	.024	-.081	.12	.96	.141	.020	.96	1	.080	-.250	.033	-.039	3.1e-11	25.43	.25	-.039	1.7e-				

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta											
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Het	P									
rs12143789	1	119497154	G/C	Prev	1	.829	.001	.89	1	.916	-.060	.034	1	.903	.040	.55	.99	.900	-.109	.3	-.001	.89	.3750	.17	.006	.098	.004	.18	32.91	.19						
rs9842422	1	119503843	G/C	Prev	1	.404	.021	8.4e-6	1	.466	-.030	.073	1	.340	.003	.9	.99	.354	.013	.85	.022	2.4e-7	.00	.84	.011	.00066	.015	6.2e-9	19.86	.28						
rs10923712	1	119505434	G/A	Prev	1	.404	.021	8.4e-6	1	.466	-.030	.073	1	.340	.003	.9	.99	.354	.013	.85	.022	2.4e-7	.00	.84	.011	.00066	.015	6.2e-9	19.86	.28						
rs11006529	1	11951497	G/A	Prev	.99	.274	.015	.0038	.99	.314	.022	.19	.96	.166	.049	.16	.98	.413	.036	.6	.018	.00015	.00	.75	.009	.01	.012	1.8e-5	.00	.52						
rs10923724	1	119546842	C/T	Prev	1	.446	.016	.0032	.99	.408	.022	.044	.96	.166	.049	.16	.98	.413	.036	.6	.018	.00015	.00	.75	.009	.01	.012	1.8e-5	.00	.58						
rs2765539	1	119574948	C/T	Prev	.99	.286	.01	.039	.99	.311	.024	.15	.96	.166	.049	.16	.98	.413	.036	.6	.018	.00015	.00	.75	.009	.01	.012	1.8e-5	.00	.58						
rs10232223	1	119574587	C/T	Prev	1	.447	.016	.0032	.99	.408	.022	.044	.96	.166	.049	.16	.98	.413	.036	.6	.018	.00015	.00	.75	.009	.01	.012	1.8e-5	.00	.58						
rs17022277	1	149828782	T/C	Prev	1	.650	.015	.0027	1	.811	-.009	.64	.99	.307	.037	.15	.97	.578	.056	.38	.015	1.2e-6	.00	.8	.011	.0007	.014	2e-8	8.07	.36						
rs11205301	1	149828782	T/C	Prev	1	.372	.005	.33	1	.665	-.000	.1	.99	.807	-.053	.13	.99	.630	-.019	.77	.005	.22	.3937	.16	.005	.14	.005	.034	24.32	.25						
rs12230361	1	150727539	G/A	Prev	1	.601	.006	.21	1	.685	-.005	.76	1	.891	-.059	.33	1	.641	-.038	.57	.007	.71	10.67	.33	.006	.07	.007	.015	.00	.48						
rs4512652	1	151115690	G/C	Prev	.96	.300	.013	.013	.95	.252	-.031	.084	.94	.572	-.027	.31	.96	.256	-.012	.88	.014	.0032	19.44	.29	.018	9.6e-5	.017	1.2e-7	6.34	.38						
rs9050938	1	154991389	T/C	Prev	1	.743	-.003	.54	1	.812	-.005	.82	1	.732	.001	.96	1	.836	.159	.075	-.002	.68	.00	.43	-.014	.98e-5	-.010	.00077	34.53	.18						
rs8606295	1	155767708	A/G	Prev	.99	.338	.001	.84	.99	.430	-.004	.81	.98	.668	.020	.24	.98	.381	-.134	.048	.001	.89	35.40	.19	-.006	.14	-.003	.3	31.48	.2						
rs1749405	1	155866091	G/A	Prev	1	.344	-.003	.6	1	.444	-.002	.9	.95	.775	.025	.2	1	.735	-.017	.55	1	.440	.079	.23	-.002	.7	.00012	.0003	.00	.89						
rs2297792	1	156011444	T/C	Prev	.95	.391	-.007	.18	.95	.484	-.003	.87	.93	.816	.003	.88	.92	.551	-.006	.81	.91	.439	.067	.32	-.006	.18	.00	.9	-.013	.00076	.00	.8				
rs122075	1	159175354	G/A	Prev	1	.423	.004	.37	.99	.478	-.009	.35	1	.906	-.007	.79	.98	.103	.005	.91	1	.642	-.013	.84	.001	.77	-.002	.55	.00	.96						
rs347313	1	162304276	A/G	Prev	1	.439	.000	.98	1	.766	-.028	.14	1	.672	-.010	.71	1	.673	-.104	.11	-.003	.47	19.42	.29	.002	.43	.001	.83	17.17	.3						
rs4471313	1	170367466	G/T	Prev	.99	.279	.012	.022	.99	.306	-.003	.88	.97	.232	-.011	.56	.98	.324	-.002	.94	.96	.234	.179	.026	.010	.045	38.96	.16	.000	.93	.004	.2	44.01	.11		
rs10919388	1	170372503	A/C	Prev	.99	.279	.012	.023	.98	.305	-.003	.88	.96	.232	-.012	.52	.96	.326	-.005	.85	.95	.234	.176	.029	.009	.05	39.57	.16	.000	.91	.004	.21	43.67	.11		
rs4656767	1	170379727	A/C	Prev	.99	.718	-.002	.67	.98	.733	-.007	.71	.99	.744	.030	.1	.97	.895	-.033	.43	.97	.706	-.113	.12	-.001	.51	-.002	.5	16.26	.31						
rs1894633	1	172331059	A/G	Prev	1	.679	.009	.079	1	.708	-.032	.056	.98	.879	.014	.56	1	.488	.008	.74	1	.732	-.041	.57	.011	.023	.00	.68	.006	.074	.007	.00	.91			
rs2001129	1	172333248	T/G	Prev	1	.430	-.007	.17	1	.377	-.014	.38	.98	.148	-.025	.27	.97	.792	.017	.59	.99	.443	.016	.8	-.007	.099	.00	.82	-.007	.014	-.007	.0034	.00	.91		
rs1011731	1	172346548	G/A	Prev	1	.424	-.006	.24	1	.373	-.017	.27	1	.148	-.029	.19	1	.795	.003	.92	.99	.444	.014	.82	-.007	.1	.00	.79	-.006	.039	-.007	.0094	.00	.89		
rs714515	1	172352990	G/A	Prev	1	.425	-.006	.25	1	.372	-.017	.29	1	.149	-.030	.18	.99	.792	.010	.76	1	.445	.013	.83	-.007	.11	.00	.75	-.007	.034	-.007	.008	.00	.86		
rs10913118	1	175954755	A/C	Prev	.94	.669	-.006	.28	.95	.724	-.013	.46	.89	.523	-.005	.75	.93	.842	-.048	.18	.9	.654	.125	.069	-.006	.19	22.69	.27	-.014	2.2e-5	-.011	2.3e-5	28.28	.22		
rs4650943	1	176414781	A/G	Prev	1	.542	-.001	.78	1	.518	-.010	.54	1	.444	.003	.85	1	.580	-.028	.28	1	.442	.125	.051	-.002	.67	24.46	.26	-.005	.18	-.004	.2	11.79	.34		
rs633715	1	17782580	T/C	Prev	.99	.804	-.049	1.3e-17	.99	.817	-.041	.041	.99	.847	-.054	.013	.97	.800	-.009	.83	.99	.842	.024	.77	-.048	1.7e-18	.00	.74	-.048	1.4e-33	-.048	1.4e-49	.00	.85		
rs571567	1	177872905	G/A	Prev	1	.804	-.050	3.7e-17	1	.816	-.041	.042	1	.849	-.054	.013	.98	.885	-.021	.59	.99	.842	.025	.77	-.048	1.7e-18	.00	.81	-.046	1.2e-24	-.047	4.3e-42	.00	.88		
rs574367	1	177873210	G/T	Prev	1	.804	-.050	6.9e-17	1	.816	-.041	.042	1	.849	-.054	.013	.98	.885	-.021	.58	1	.843	.029	.73	-.048	1.7e-18	.00	.81	-.046	4.6e-33	-.047	6.3e-50	.00	.89		
rs630372	1	177885762	G/A	Prev	1	.780	-.048	1.1e-16	1	.787	-.030	.11	1	.785	-.041	.029	.99	.829	.031	.71	1	.045	2.7e-19	.00	.77	-.045	2.7e-19	.00	.77	-.045	6.8e-41	.00	.87			
rs539515	1	177889025	A/C	Prev	1	.809	-.050	6.4e-17	1	.812	-.037	.061	1	.849	-.055	.012	1	.746	-.020	.48	1	.844	.024	.78	-.048	1e-18	.00	.77	-.047	3e-25	-.048	2.6e-42	.00	.81		
rs543874	1	177889480	A/G	Prev	1	.808	-.050	1.1e-16	1	.811	-.041	.039	1	.849	-.055	.012	1	.745	-.021	.47	1	.844	.022	.79	-.048	1e-18	.00	.75	-.048	2.6e-35	-.048	4.2e-52	.00	.86		
rs545608	1	177909121	G/C	Prev	1	.808	-.050	8.3e-17	1	.812	-.039	.048	1	.810	-.056	.0058	1	.756	-.013	.65	1	.842	.020	.81	-.051	5.1e-21	-.019	3.4e-38	.00	.75	-.049	1e-14	.00	.85		
rs591120	1	177902753	G/C	Prev	1	.558	-.017	.00038	1	.569	-.014	.39	1	.668	-.024	.16	1	.532	.012	.64	1	.590	.037	.57	-.016	.00015	.00	.81	-.012	5.2e-12	-.019	1e-14	.00	.88		
rs10913469	1	177913475	T/C	Prev	1	.809	-.046	1.7e-14	1	.810	-.041	.035	1	.817	-.027	.19	1	.710	-.037	.18	1	.829	.069	.4	-.044	9.2e-16	.00	.58	-.047	2.3e-23	-.045	1.9e-37	.00	.69		
rs1926872	1	184018319	T/C	Prev	1	.663	.003	.55	1	.691	-.012	.49	1	.547	.020	.2	1	.842	.034	.33	1	.669	.027	.69	.006	.21	.00	.73	.005	.24	-.006	.086	.00	.84		
rs22774432	1	184020945	G/A	Prev	1	.664	.002	.69	1	.691	-.011	.52	1	.549	.020	.21	1	.842	.032	.35	1	.671	.028	.69	.005	.3	.00	.73	.006	.074	-.005	.044	.00	.84		
rs1046934	1	184023529	A/C	Prev	1	.664	.002	.64	1	.692	-.012	.48	1	.547	.021	.19	1	.843	.028	.42	1	.671	.028	.69	.005	.26	.00	.74	.006	.074	-.005	.044	.00	.85		
rs10920678	1	190239907	A/G	Prev	.99	.417	.020	2.9e-5	.99	.318	-.018	.29	1	.355	.015	.35	.98	.405	.052	.045	.99	.357	-.066	.32	.020	4.2e-6	.00	.51	.014	8.7e-6	-.017	2.3e-9	.00	.55		
rs491055	1	190308834	A/G	Prev	.98	.426	.020	2.9e-5	.97	.320	-.014	.4	.94	.394	.026	.12	.98	.455	.041	.11	.98	.361	-.071	.29	.020	3.5e-6	.00	.6	.015	4.6e-5	-.017	2.3e-9	.00	.55		
rs1998871	1	190670884	C/T	Prev	1	.439	-.006	.23	1	.461	-.017	.27	1	.330	-.003	.88	1	.330	.031	.25	1	.519	-.006	.92	-.005	.29	.00	.66	-.011	.0027	-.009	.0019	.00	.63		
rs10754220	1	197244290	G/A	Prev	.99	.721	.022	3.1e-5	.99	.751	.030	.098	.94	.833	.022	.55	.98	.715	-.014	.85	.925	.98e-6	.00	.91	.013	.0013	-.017	1.1e-7	.00	.74	-.020	.043	-.020	.0053	.00	.78
rs16848342	1	201754444	G/C	Prev	.95	.458	-.018	.1	1	.966	-.051	.23	.66	.996	.130	.39	1	.923	-.046	.45	.84	.981	-.211	.42	-.020	.055	.00	.63	-.020	.043	-.020	.0053	.00	.78		
rs2820292	1	201784287	A/C	Prev	1	.457	-.023	1.2e-6	1	.540	-.047	.025	1	.742	.001	.94																				

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta										
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Eff	P								
rs7570971	2	135837906	G/A	Prev	1	.598	-.012	.012	.97	.331	-.024	.14	.94	.039	-.028	.49	.92	.168	.001	.97	.1	.176	-.014	.85	.013	.0043	.00	.92							
rs4988235	2	136080646	G/A	Prev	1	.386	-.016	.00063	1	.676	-.017	.28	.98	.84	.826	-.003	.93	.94	.826	-.003	.93	.1	.819	-.028	.71	-.016	1.5e-6	.00	.92						
rs126017004	2	1426015136	G/C	Prev	.99	.765	-.002	.75	.98	.784	-.005	.44	.98	.715	-.011	.78	.99	.752	-.050	.52	.99	.004	.4	-.002	.49	.00	.99	.99							
rs28906052	2	143959931	T/C	Prev	1	.838	-.017	.0092	1	.881	-.026	.13	.91	.978	-.001	.99	1	.690	-.046	.087	1	.946	-.111	.43	-.019	.0013	.00	.7							
rs2121279	1	875	-.015	.036	.95	.919	-.027	.33	.91	.993	-.121	.99	.91	.922	-.073	.24	1	.960	-.109	.51	1	.960	-.109	.51	-.012	2.3e-8	.00	.46							
rs21214967	2	1609589486	T/C	Prev	.99	.616	-.012	.011	.99	.667	-.010	.56	.99	.664	-.006	.37	.99	.787	-.088	.27	.99	.011	.012	.00	.64	-.007	.0038	.00	.6						
rs164507689	2	164507689	T/C	Prev	.99	.835	-.017	.0079	.99	.698	-.036	.11	.99	.647	-.027	.11	.96	.744	.006	.85	.97	.855	-.135	.15	-.010	9e-7	.00	.14							
rs1460678	2	164584156	C/G	Prev	.98	.888	-.008	.27	.96	.920	.016	.58	.98	.897	-.047	.072	.93	.871	-.038	.33	.95	.885	-.190	.071	-.022	1.3e-6	.50	.70							
rs10170665	2	165345660	A/C	Prev	1	.336	-.003	.51	.99	.339	.011	.48	1	.612	.001	.94	.99	.556	.026	.31	.99	.442	.033	.62	.011	.88	.00	.65							
rs10195252	2	165513091	A/C	Prev	.99	.595	-.003	.52	1	.686	-.015	.36	.98	.900	-.031	.24	.99	.309	.021	.45	.99	.786	-.052	.52	-.004	.34	.00	.61							
rs1128249	2	165528624	G/T	Prev	.99	.606	-.003	.51	1	.693	-.008	.64	.97	.901	-.030	.27	1	.308	.013	.65	.98	.789	-.056	.49	-.012	7.2e-5	.00	.54							
rs13388219	2	165528876	C/T	Prev	.99	.606	-.003	.51	1	.693	-.008	.64	.97	.901	-.030	.27	1	.309	.012	.66	.98	.789	-.056	.49	-.004	.37	.00	.78							
rs6717858	2	165539661	T/C	Prev	1	.596	-.004	.37	1	.691	-.005	.77	.96	.899	-.027	.32	.99	.309	.004	.89	1	.783	-.047	.54	-.005	.27	.00	.9							
rs12692737	2	1655454309	C/A	Prev	1	.646	-.009	.064	.99	.727	-.055	.078	.98	.388	-.012	.65	1	.827	-.051	.56	1	.010	.0036	.00	.61	-.010	.0028	.00	.74						
rs12692738	2	165558252	C/A	Prev	1	.756	-.009	.088	1	.783	-.004	.83	1	.931	-.045	.15	1	.837	-.051	.72	1	.837	-.051	.72	-.013	.00019	-.012	4.3e-5	.00	.68					
rs3769885	2	165592390	G/A	Prev	1	.514	-.003	.53	.99	.533	-.020	.21	1	.629	-.033	.44	.98	.383	.005	.84	1	.567	.037	.56	-.011	.00055	-.009	.00037	7.33	.37					
rs2390669	2	169091942	A/C	Prev	1	.868	-.005	.47	1	.817	-.007	.73	1	.709	-.003	.87	1	.894	-.036	.38	1	.813	.004	.97	-.006	.36	.00	.96	.00	.93					
rs20429695	2	1765958366	T/C	Prev	1	.769	-.008	.14	1	.648	.001	.97	1	.454	.006	.69	1	.475	.013	.6	1	.528	.013	.83	-.005	.3	.00	.81	.00	.55					
rs6433857	2	181517996	C/T	Prev	.97	.394	.005	.32	.94	.477	.001	.96	.99	.594	.029	.07	.94	.350	-.028	.31	.97	.464	.013	.85	.006	.21	.00	.44	.00	.49					
rs1528435	2	181550962	C/T	Prev	1	.377	-.010	.042	.99	.356	-.029	.067	1	.339	-.038	.025	.99	.389	.021	.43	.99	.337	-.087	.21	-.013	.0039	37.09	.17	.00	.49					
rs7588437	2	181575281	G/A	Prev	.99	.636	.012	.013	.98	.712	-.034	.047	.99	.735	.058	.0014	.98	.789	.021	.5	.99	.704	.099	.17	-.017	.00014	51.52	.083	.00	.41					
rs11679338	2	181606895	C/T	Prev	1	.333	-.018	.00044	1	.311	-.039	.018	1	.259	-.066	.00026	.99	.282	.023	.42	.98	.282	-.091	.22	-.022	2.2e-6	63.87	.026	-.020	2.4e-11	55.44	.047			
rs13424740	2	188083123	T/C	Prev	.99	.522	.006	.24	.99	.538	-.034	.03	.99	.756	.006	.73	.98	.287	.017	.55	.97	.404	.032	.65	-.008	.059	.00	.52	.00	.62					
rs1569135	2	188115398	A/G	Prev	1	.524	.005	.28	1	.546	.032	.04	1	.756	.007	.69	1	.401	.011	.65	1	.423	.010	.89	.008	.082	.00	.6	.00	.69	.69				
rs13404250	2	188116196	C/T	Prev	.99	.661	.006	.22	.99	.720	.042	.013	.99	.825	-.017	.41	.99	.762	.004	.88	.99	.633	.083	.22	.008	.083	41.81	.14	.00	.000011	31.22	.2			
rs17406900	2	2037854202	C/G	Prev	.98	.449	-.004	.35	1	.544	-.009	.54	.97	.647	-.009	.6	.99	.741	.052	.071	.98	.359	-.022	.74	-.004	.37	1.35	.4	-.013	1.1e-5	-.010	5.2e-5	30.40	.21	
rs7569376	2	205385322	T/C	Prev	.99	.213	.009	.12	.99	.205	.000	.99	.98	.465	.026	.098	.99	.520	-.003	.91	.99	.298	.012	.87	.010	.059	.00	.81	.00	.84	.84				
rs972540	2	207244783	A/G	Prev	1	.733	-.017	.0017	1	.797	-.042	.029	.99	.807	-.023	.26	.99	.827	.000	1	.99	.702	.067	.34	-.018	.00026	.00	.49	.00	.64	.64				
rs13387838	2	207281447	G/A	Prev	.99	.980	-.059	.0005	.79	.998	-.221	.0058	.52	.998	-.032	.89	.72	.994	-.008	.96	.99	.996	.090	.85	-.065	7.4e-5	25.59	.26	-.029	.0025	-.039	3.9e-6	46.72	.11	
rs17200316	2	208265518	A/G	Prev	.97	.822	-.014	.023	.91	.851	-.041	.068	.96	.863	-.030	.2	.92	.946	.038	.52	.89	.822	-.097	.28	-.017	.0037	.00	.51	.00	.67	.67				
rs11693226	2	208263279	C/T	Prev	1	.785	-.011	.058	1	.803	-.059	.0022	1	.809	-.036	.82	1	.875	.081	.035	1	.767	-.086	.26	-.013	.015	68.88	.012	-.019	1e-7	-.020	1.5e-9	63.85	.00	.16
rs7421089	2	211988412	A/G	Prev	.99	.295	.015	.0037	.98	.259	.023	.2	.98	.189	-.011	.58	.97	.286	.020	.48	.98	.315	-.128	.068	.014	.0042	32.81	.2	.018	1.3e-5	.016	2.2e-7	19.33	.27	
rs18084180	2	211988980	A/G	Prev	.99	.295	.015	.0036	.98	.258	.023	.2	.99	.183	-.009	.65	.97	.285	.020	.49	.99	.312	-.129	.068	.014	.0037	31.28	.21	.018	1.6e-5	.016	2.4e-7	21.93	.29	
rs6435678	2	212710468	G/C	Prev	.99	.881	-.005	.47	.99	.896	.006	.83	.95	.954	-.011	.77	.98	.774	-.000	.99	1	.896	.044	.69	-.002	.74	-.003	.5	.00	.98	.98				
rs7599312	2	213413231	G/A	Prev	.96	.735	.021	9.5e-5	.93	.786	.005	.8	.95	.955	.068	.08	.89	.621	.010	.71	.91	.827	.034	.71	.020	.92e-5	.00	.49	.00	.62	.62				
rs4924000	2	219349752	C/T	Prev	.98	.423	.011	.028	.97	.398	-.014	.37	.96	.219	-.007	.74	.98	.531	.017	.51	.97	.312	-.023	.74	.010	.022	.00	.9	.00	.82	.82				
rs4072096	2	227036003	A/C	Prev	1	.329	-.015	.0012	.99	.495	-.010	.97	1	.474	-.009	.57	.99	.335	.008	.77	1	.523	-.004	.86	-.013	.0022	.00	.81	.00	.87	.87				
rs21706040	2	227092802	A/C	Prev	1	.356	-.009	.071	1	.450	-.009	.39	1	.091	.030	.26	.99	.302	.009	.75	1	.259	-.013	.95	-.014	.004	.00	.95	.00	.93	.93				
rs2972147	2	227098654	T/C	Prev	.99	.359	.009	.069	1	.255	.008	.67	1	.093	.030	.26	.95	.322	.016	.58	.94	.264	-.021	.78	.010	.038	.00	.94	.00	.93	.93				
rs2943660	2	227103921	T/C	Prev	.99	.358	.008	.11	.99	.268	.012	.5	.98	.093	.030	.27	.96	.500	.003	.9	.94	.269	-.027	.72	.009	.062	.00	.92	.00	.92	.92				
rs1515108	2	227123086	C/T	Prev	.99	.365	.006	.19	.98	.268	.013	.45	1	.099	.029	.27	.98	.268	-.062	.38	.99	.268	-.062	.38	.009	.062	.00	.42	.00	.42	.42				
rs2943668	2	227123084	A/G	Prev	1	.358	.005	.31	.99	.250	.020	.26	.99	.097	.029	.28	1	.313	-.027	.31	.98	.231	-.099	.18	.005	.24	17.59	.3	.013	5.4e-5	.010	5.6e-5	23.17	.26	
rs2673140	2	227159867	G/A	Prev	.99	.358	.005	.35	.99	.250	.019	.29	.98	.101	.027	.31	.98	.288	-.048	.082	.99	.230	-.096	.2	.004	.34	.44	.00	.00	.00	.00	.00			
rs10498218	2	228006255	A/G	Prev	.63	1.000	.360	.04	.86	.998	-.041	.81	.69	.999	.513	.17	.83	.973	-.072	.4	.039	1.000	—	1	.016	.81	59.26	.086	.00	.00	.00	.00	.00		
rs2580821	2	232804155	C/A	Prev	1	.911	-.015	.066	1	.926	-.032	.27	1	.990	-.047	.56	1	.958	-.053	.4	1	.919	.002	.98	-.013	.11	.00	.55	.00	.67	.67				
rs3111612	2	232860077	G/A	Prev	1	.088	-.017	.053	1	.010	-.082	.31	1	.035	-.041	.55	1	.082	-.007	.96	1	.082	-.007	.96	.012	.14	14.52	.32	.00	.46	.46				
rs6437061	2	233185052	A/C	Prev	.94	.576	-.004	.37	.97	.447	-.001	.94	.91	.178	-.0																				

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta										
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Eff	P								
rs4378999	3	51208646	T/A	Prev	1	.110	-.014	.06	.99	.084	-.022	.42	1	.063	-.010	.77	.97	.032	-.071	.21	.98	.070	.138	.29	-.014	.046	.00	.57	-.017	.0033	-.016	.00065	.00	.69	
rs10600330	3	52288946	T/C	Prev	1	.494	-.013	.0047	.98	.521	-.017	.37	.98	.623	-.010	.46	.96	.336	-.054	.038	1	.376	.122	.067	-.014	.014	.014	.3948	.16	-.005	.094	-.008	.0013	.4573	.1
rs6784615	3	52506426	C/T	Prev	.87	.059	-.008	.43	.96	.054	-.007	.83	.98	.021	-.035	.53	.93	.024	.018	.84	.89	.041	-.045	.79	.008	.43	.00	.97	.012	.089	.011	.003	.00	.48	
rs13303	3	52558008	C/T	Prev	.91	.440	-.014	.0041	.99	.393	.001	.97	.91	.552	-.016	.35	.98	.347	-.056	.036	.87	.649	.038	.59	-.014	.001	.00	.43	-.011	.00045	-.011	3.6e-5	.00	.48	
rs12480528	3	52567014	G/T	Prev	.91	.440	-.014	.0041	.99	.424	.007	.64	.91	.562	-.013	.42	.99	.353	-.048	.063	.85	.717	.079	.33	-.015	.001	.2124	.28	-.011	.00045	-.012	1.7e-6	.96	.35	
rs2590838	3	52622086	G/A	Prev	.99	.493	-.015	.0016	.99	.428	.001	.94	.99	.543	-.014	.36	.99	.369	-.061	.02	.87	.691	.034	.64	-.014	.00098	.3303	.2	-.010	.00024	-.012	1.2e-6	.2061	.28	
rs2270824	3	52637486	C/A	Prev	.94	.455	-.012	.013	.99	.383	.007	.68	.98	.548	-.015	.36	.95	.278	-.039	.18	.87	.610	.034	.64	-.012	.0097	.00	.69	-.010	.00019	-.011	5.2e-5	.00	.8	
rs13063798	3	52647257	G/A	Prev	1	.502	-.011	.0026	.99	.435	-.009	.35	1	.560	-.017	.28	1	.484	-.062	.014	1	.692	.031	.67	-.012	.001	.2708	.17	-.011	.00036	-.012	4e-6	.2522	.25	
rs22829247	3	52727248	G/A	Prev	1	.377	-.011	.0021	.99	.513	-.003	.85	1	.588	-.020	.21	1	.484	-.062	.014	1	.723	.028	.43	-.012	.004	.3288	.27	-.008	.006	-.010	.0001	.1533	.33	
rs6617	3	52740182	C/T	Prev	1	.378	-.011	.0024	.99	.512	-.003	.84	1	.588	-.020	.21	1	.484	-.062	.014	1	.723	.028	.43	-.012	.004	.3288	.27	-.008	.006	-.010	.0001	.1533	.33	
rs11130319	3	52755092	A/T	Prev	.98	.594	-.011	.003	.98	.545	-.003	.83	.99	.589	-.018	.26	.97	.735	-.071	.017	.96	.737	.028	.43	-.011	.011	.2049	.28	-.008	.033	-.009	.0011	.2080	.28	
rs1029871	3	52797634	G/C	Prev	1	.602	-.012	.012	1	.354	-.009	.99	.98	.635	-.016	.33	1	.348	-.045	.086	.94	.677	.032	.66	-.012	.0067	.00	.7	-.010	.00025	-.013	2e-7	.00	.79	
rs2710323	3	52815905	G/C	Prev	.97	.313	-.015	.0026	1	.444	-.009	.95	.98	.61	-.021	.2	1	.348	-.045	.086	.94	.677	.032	.66	-.012	.0067	.00	.7	-.010	.00025	-.013	2e-7	.00	.79	
rs2500149	3	52824921	C/T	Prev	.99	.618	-.013	.0052	1	.352	.004	.82	.97	.654	-.023	.17	.99	.672	-.059	.031	.94	.771	.031	.53	-.013	.0026	.1653	.24	-.011	.00068	-.012	6e-6	.362	.39	
rs2240950	3	52831009	C/T	Prev	.95	.648	-.011	.029	.99	.374	-.001	.97	.94	.662	-.025	.15	.98	.680	-.059	.031	.86	.766	.086	.24	-.013	.0043	.00	.35	-.010	.00075	-.011	1.1e-6	.894	.36	
rs3617	3	52852605	G/T	Prev	.94	.531	-.012	.012	1	.453	-.025	.14	1	.602	-.025	.14	1	.373	-.031	.26	.79	.606	.088	.24	-.013	.0043	.00	.35	-.010	.00075	-.011	1.1e-6	.894	.36	
rs40687657	3	52852638	C/T	Prev	.96	.727	-.012	.032	.99	.622	-.027	.092	.94	.697	-.040	.022	.99	.704	-.030	.33	.92	.832	.103	.28	-.016	.001	1.41	.4	-.011	.00071	-.013	3e-5	.00	.47	
rs2535635	3	52859630	G/G	Prev	.95	.609	-.012	.016	1	.495	-.023	.16	.94	.639	-.039	.022	.99	.704	-.030	.33	.92	.832	.103	.28	-.016	.001	1.41	.4	-.011	.00071	-.013	3e-5	.00	.47	
rs13076366	3	53747374	C/A	Prev	.99	.776	-.018	.0014	.99	.839	-.012	.36	.98	.886	-.040	.55	.98	.741	-.031	.29	.98	.910	.196	.085	-.018	.00086	.00	.41	-.020	.68e-6	-.019	2.2e-8	.00	.35	
rs56384862	3	58399863	A/G	Prev	1	.623	-.019	.0013	1	.692	-.017	.32	1	.974	-.058	.23	1	.851	-.008	.83	1	.792	.104	.17	-.018	8e-5	.00	.5	-.011	.0042	-.014	2.6e-6	.49	.41	
rs54579268	3	58410554	C/T	Prev	.99	.618	-.019	.0001	.99	.683	-.017	.3	1	.973	-.054	.25	.96	.763	-.034	.27	.98	.789	.093	.13	-.018	.00013	.2888	.23	-.010	.00056	-.013	5.5e-6	.3061	.21	
rs1916799	3	61232975	G/A	Prev	.99	.859	-.017	.016	.99	.891	-.073	.0033	.99	.887	-.034	.2	.98	.950	-.002	.97	.99	.799	.145	.008	-.022	.00037	.4749	.11	-.018	.00036	.020	7.9e-7	.3595	.17	
rs2365389	3	61236462	C/T	Prev	.99	.594	-.018	.00021	.99	.439	-.025	.1	.98	.151	-.019	.39	.98	.244	.081	.0068	.99	.461	.051	.44	-.020	6.2e-6	.1435	.32	-.020	1.6e-10	.020	3.4e-15	.00	.46	
rs9818550	3	61271329	T/G	Prev	.99	.737	-.014	.012	.98	.625	-.031	.048	.99	.475	-.006	.69	.99	.425	.026	.31	.99	.563	.030	.64	-.014	.0036	.00	.54	-.013	.0011	-.014	1.2e-5	.00	.68	
rs9860730	3	64701146	A/G	Prev	1	.675	-.017	.00056	1	.448	-.003	.85	1	.237	-.021	.23	1	.250	.018	.54	.99	.287	-.019	.79	-.012	.0074	.3962	.16	-.015	8.2e-6	-.014	1.7e-7	.2717	.23	
rs4504165	3	64701890	T/C	Prev	1	.676	-.017	.00057	1	.448	-.003	.86	.99	.259	-.021	.25	1	.252	.015	.61	.98	.298	-.036	.61	-.012	.0065	.3736	.17	-.016	1.6e-5	-.014	4.5e-7	.2603	.24	
rs4616635	3	64702275	C/G	Prev	1	.695	-.014	.0054	1	.741	-.007	.69	1	.740	.004	.81	1	.327	.011	.67	1	.446	.023	.73	-.011	.013	.00	.71	-.017	8.9e-7	-.015	5.1e-8	.00	.7	
rs66818586	3	64703394	G/T	Prev	1	.697	-.014	.0056	1	.749	-.008	.67	1	.743	.004	.85	.99	.458	.006	.83	1	.447	.013	.84	-.012	.012	.00	.81	-.016	4e-5	-.014	1.8e-6	.00	.45	
rs6795735	3	64705365	C/T	Prev	1	.563	-.011	.027	1	.374	-.006	.71	1	.256	.015	.39	1	.258	.015	.62	1	.267	.064	.38	-.007	.09	.00	.42	-.012	.00011	-.011	3.1e-5	.00	.84	
rs2371767	3	64718258	G/A	Prev	1	.697	-.014	.0048	1	.773	-.008	.68	1	.428	.002	.94	1	.395	.002	.94	1	.450	-.007	.92	-.012	.011	.00	.77	-.013	4.8e-7	-.016	2.6e-8	.00	.73	
rs7638389	3	64729892	G/A	Prev	1	.265	-.015	.0052	1	.311	-.026	.11	1	.352	-.008	.21	1	.395	.002	.94	1	.450	-.007	.92	-.012	.011	.00	.77	-.013	4.8e-7	-.016	2.6e-8	.00	.73	
rs7628338	3	72432888	C/T	Prev	1	.366	-.007	.14	1	.370	-.020	.91	.97	.298	-.023	.2	1	.555	.004	.86	1	.352	-.008	.81	-.004	.32	.2686	.24	-.009	.028	-.007	.022	16.74	.31	
rs12330322	3	72453555	C/T	Prev	.99	.785	-.002	.29	.99	.771	-.020	.99	.99	.756	-.024	.21	.99	.686	.003	.91	.98	.828	-.018	.13	-.002	.76	.00	.58	-.014	.00011	-.010	.0007	26.32	.24	
rs6549455	3	72457221	A/G	Prev	1	.363	-.006	.19	.99	.361	-.009	.57	.99	.261	-.020	.28	.99	.537	.011	.67	.99	.330	.066	.33	-.005	.27	.00	.42	-.010	.001	-.008	.008	.00	.56	
rs1840969	3	78830840	T/A	Prev	1	.414	-.001	.89	.99	.481	-.007	.63	.99	.266	-.031	.079	.99	.487	.009	.73	1	.467	.047	.47	-.001	.74	.00	.54	-.010	.001	-.008	.0031	.6138	.024	
rs349570	3	81792112	C/A	Prev	.99	.668	-.009	.068	.97	.651	-.010	.53	1	.481	-.024	.13	.98	.539	.006	.8	.98	.613	-.053	.44	-.006	.18	47.23	.11	-.016	2.6e-8	-.014	1.3e-7	.4767	.089	
rs6792696	3	81874009	G/A	Prev	.99	.666	-.009	.068	.98	.692	-.003	.85	.99	.535	.019	.23	.95	.717	-.070	.016	.98	.659	.013	.85	-.008	.08	47.23	.11	-.016	2.6e-8	-.014	1.3e-7	.4767	.089	
rs6794880	3	84455172	G/A	Prev	1	.147	-.008	.23	1	.109	-.037	.13	1	.030	-.024	.61	.99	.241	-.028	.34	1	.467	.047	.47	-.001	.74	.00	.54	-.010	.001	-.008	.0031	.6138	.024	
rs62261676	3	85698577	KP	Prev	.99	.796	.033	3e-8	.99	.831	.061	.0022	1	.673	.014	.41	.92	.334	.059	.26	.97	.891	.005	.96	-.033	5.6e-10	.00	.46	-.015	.0021	-.012	8.7e-11	.5372	.055	
rs13078960	3	85807590	T/C	Prev	.99	.790	-.017	.0038	.99	.844	-.056	.0087	.99	.975	-.034	.49	.98	.927	-.084	.087	1	.909	-.214	.049	-.021	.00014	.5012	.091	-.020	1.7e-14	-.027	3.6e-17	.47	.081	.088
rs13068138	3	85809425	C/T	Prev	.99	.790	-.017	.0038	.99	.844	-.056	.0088	.99	.975	-.034	.49	.98	.927	-.084	.087	1	.909	-.214	.049	-.021	.00014	.5012	.091	-.020	1.7e-14	-.027	3.6e-17	.47	.081	.088

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta										
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Het	P								
rs2035935	3	141306013	A/G	Prev	.99	.936	-.016	.11	1	.792	.018	.35	1	.762	.012	.68	.96	.895	.056	.62	-.011	.16	13.53	.33	-.037	8.2e-9	-.026	1.1e-7	55.83	.045					
rs2295322	3	141326012	T/C	Prev	1	.356	-.015	.12	1	.790	.018	.34	1	.99	.007	.94	1	.899	.009	.94	-.011	.16	.00	.45	-.041	2.8e-8	-.027	5.4e-7	56.22	.044					
rs1868637	3	150187634	T/C	Prev	.99	.366	-.006	.26	.99	.588	-.008	.07	.99	.332	.047	.985	.98	.475	-.028	.68	-.002	.71	48.48	.1	-.003	.43	-.002	.4	36.04	.17					
rs94438	3	154018887	G/C	Prev	1	.599	-.015	.0021	.99	.588	-.001	.96	1	.509	-.007	.64	.98	.637	-.032	.23	-.004	.016	.00	.8	-.014	.00023	-.014	1.2e-6	.00	.9					
rs17451107	3	156797609	T/C	Prev	.98	.588	-.006	.26	.99	.582	-.006	.69	.99	.494	.007	.66	.99	.631	.078	.29	-.004	.41	16.56	.31	-.005	.16	-.004	.11	.00	.44					
rs1482852	3	156798294	A/G	Prev	.99	.570	.006	.24	.99	.555	-.006	.7	.99	.379	.008	.63	.99	.486	-.049	.052	.98	.513	.099	.13	.004	.3	.003	.18	28.02	.22					
rs2649734	3	157347640	G/A	Prev	.99	.371	.009	.082	.98	.391	.030	.062	.99	.289	.001	.94	.98	.350	-.028	.28	.98	.542	.032	.62	.009	.048	.47	.4	.015	6.3e-5					
rs12493901	3	171922055	G/A	Prev	.95	.512	-.001	.89	.97	.544	-.004	.81	.93	.562	.020	.23	.94	.844	.039	.27	.94	.602	.009	.89	-.001	.78	.00	.61	-.006	.051					
rs13069244	3	180441172	G/A	Prev	.97	.924	-.010	.25	.96	.940	-.003	.92	.72	.991	.017	.86	.91	.973	-.021	.48	-.010	.26	.00	.68	-.002	4.7e-6	-.019	8.7e-5	.00	.54					
rs11546168	3	183976103	C/T	Prev	1	.826	.004	.51	.93	.861	-.020	.39	1	.927	.010	.74	.82	.947	.124	.047	1	.874	.081	.41	.001	.019	.008	.023	19.82	.28					
rs11545169	3	184020542	C/T	Prev	.86	.845	.000	.99	1	.873	-.020	.38	.89	.962	.045	.31	1	.957	.178	.0045	.79	.879	.138	.22	.008	.23	.005	.029	57.26	.039					
rs2178403	3	184039666	A/G	Prev	.8	.255	-.013	.031	.99	.204	.020	.3	.95	.331	.005	.75	.96	.073	.026	.6	.76	.366	.028	.77	.013	.016	.00	.98	.010	.00019					
rs4680392	3	185524061	A/G	Prev	1	.711	.008	.13	1	.728	-.016	.36	1	.744	-.015	.41	1	.329	-.048	.071	1	.629	.007	.92	.003	.55	.40	.056	.15	.010	.01				
rs6809651	3	185814642	G/A	Prev	1	.867	.038	6e-8	1	.903	.027	.4	1	.940	.015	.65	.97	.813	-.001	.97	.98	.824	.039	.65	-.035	9.4e-8	.00	.73	.045	1e-21	.041	1.4e-27	.00	.59	
rs1516725	3	185824004	T/C	Prev	1	.134	-.038	5e-8	1	.060	-.015	.66	.98	.167	-.006	.87	1	.173	-.026	.76	.034	5.1e-8	.00	.84	-.045	1.9e-22	-.042	7.3e-27	.00	.71	.08				
rs73052033	3	185828465	T/C	Prev	1	.818	.039	4.3e-11	1	.869	.041	.073	1	.895	.092	.025	1	.791	.003	.97	.039	1.8e-11	.00	.65	-.039	3.2e-17	-.039	3.7e-27	.00	.78	.15				
rs70647305	3	185834290	T/C	Prev	.98	.213	-.041	4.2e-12	.99	.182	-.037	.06	.96	.077	.003	.93	.95	.384	.028	.31	.97	.245	.028	.72	-.036	2.3e-20	-.036	7.2e-31	37.76	.15	.08				
rs9816226	3	185834499	A/T	Prev	.99	.183	-.038	1.1e-9	.99	.136	-.042	.063	.95	.062	-.016	.64	.94	.204	-.014	.67	.97	.211	.005	.95	-.036	2.8e-10	.00	.87	-.039	1.9e-30	.00	.92			
rs7684221	4	17957354	G/A	Prev	1	.831	-.001	.87	1	.823	.007	.73	1	.859	.015	.51	.96	.621	-.030	.24	1	.742	.004	.96	-.001	.89	.00	.97	-.000	.92	.00	.86			
rs34811474	4	25408838	G/A	Prev	.99	.774	.036	4.2e-10	1	.857	-.087	8.6e-5	.99	.986	-.050	.47	.76	.936	.098	.093	1	.936	.070	.58	-.039	1.4e-12	48.74	.099	.00	.00	.00	.86			
rs16992623	4	36813105	C/T	Prev	.97	.838	.022	.00064	.96	.840	-.044	.039	.98	.558	-.008	.62	1	.866	.032	.39	.96	.739	.011	.88	-.014	.016	64.09	.025	.017	2.9e-5	.016	1.7e-6	55.99	.045	
rs1996023	4	45164637	T/G	Prev	.97	.568	.016	.0014	.97	.557	.014	.36	.93	.328	.039	.026	.94	.601	.055	.037	.92	.672	-.044	.55	-.018	5.4e-5	8.55	.36	-.028	2e-19	-.025	1.5e-22	37.02	.16	
rs13130484	4	45175691	C/T	Prev	1	.568	-.029	1.5e-9	1	.611	-.026	.092	1	.721	-.023	.19	1	.749	-.070	.016	1	.583	-.073	.26	-.030	4.2e-38	-.037	2.4e-47	22.93	.03	.26	.02			
rs16858082	4	45175804	T/C	Prev	.99	.568	.017	.00048	.99	.556	.016	.3	.99	.339	.032	.053	.97	.589	.052	.046	.98	.695	-.040	.59	-.028	1.2e-19	-.025	4.4e-23	18.84	.29	.00	.63			
rs35478252	4	45177546	AC/A	Prev	.99	.569	-.029	1.3e-9	1	.721	-.023	.19	1	.749	-.071	.015	.99	.585	-.070	.28	1	.584	-.066	.31	-.030	1.3e-11	.00	.63	-.030	1.3e-11	.00	.63	.00		
rs12641981	4	45179883	C/T	Prev	1	.568	-.029	1.1e-9	1	.611	-.025	.1	1	.754	-.073	.012	1	.584	-.066	.31	1	.584	-.066	.31	-.030	1.2e-11	.00	.6	-.040	9.8e-38	-.036	3.9e-47	22.39	.27	
rs12607026	4	45181334	A/T	Prev	1	.567	-.029	1.5e-9	1	.721	-.023	.19	1	.721	-.023	.19	1	.748	-.068	.02	1	.585	-.069	.29	-.029	1.2e-11	.00	.68	-.038	2.3e-26	-.035	9.2e-36	.00	.45	
rs10038397	4	45182527	A/G	Prev	1	.567	-.029	1.5e-9	1	.611	-.028	.076	1	.720	-.023	.19	1	.748	-.068	.02	1	.586	-.072	.27	-.030	1.4e-11	.00	.68	-.037	1.4e-47	19.64	.29	.00		
rs348495	4	45184452	G/A	Prev	.99	.584	.018	.00024	.99	.540	.019	.22	1	.336	.030	.066	.98	.330	.062	.02	.99	.686	-.037	.6	-.020	6.7e-6	.00	.45	-.028	4.8e-19	.025	2e-23	18.24	.3	
rs10038398	4	45186139	G/A	Prev	.99	.570	-.029	9.4e-10	.99	.612	-.028	.077	.99	.723	-.022	.21	.99	.747	-.062	.035	.99	.588	-.067	.31	-.030	1.2e-11	.00	.79	-.035	1e-35	.00	.58	.00		
rs13132420	4	56392813	G/A	Prev	1	.632	-.007	.14	1	.570	-.007	.67	1	.450	.001	.94	1	.787	-.011	.72	1	.573	-.078	.23	-.007	.12	.00	.83	-.002	.5	.00	.57	.00		
rs3805389	4	56482750	G/A	Prev	1	.748	.006	.26	.99	.791	-.007	.9	.99	.887	.007	.77	.97	.837	-.062	.073	.99	.753	.074	.31	.004	.42	21.20	.28	.009	.0066	.008	.0065	13.75	.33	
rs16848284	4	73476901	T/C	Prev	.99	.553	.001	.89	.96	.607	-.001	.95	.93	.468	-.024	.14	.98	.701	-.021	.45	.96	.442	.069	.27	-.001	.74	.00	.43	.005	.11	.003	.27	4.76	.39	
rs7697556	4	73515313	T/C	Prev	.99	.473	-.002	.65	1	.436	-.001	.95	.93	.544	.018	.28	1	.772	-.003	.93	.99	.611	-.066	.3	-.001	.83	.00	.66	-.004	.19	-.003	.24	.00	.74	
rs17001654	4	77129568	C/G	Prev	.94	.836	-.007	.29	.94	.795	.015	.44	.86	.973	-.030	.57	1	.825	-.023	.51	.99	.894	-.041	.7	-.006	.34	.00	.78	-.031	7.8e-9	-.020	6.1e-7	54.99	.049	
rs2198271	4	82149031	C/T	Prev	1	.742	-.002	.78	1	.720	-.005	.82	1	.824	.000	.99	1	.382	-.049	.062	1	.752	.025	.74	-.003	.5	.00	.51	.002	.67	-.000	.95	.00	.56	
rs9091328	4	89713121	C/T	Prev	.99	.517	.006	.22	.99	.497	.011	.48	1	.343	.008	.61	.99	.416	-.003	.91	.99	.434	-.017	.79	.006	.16	.00	.98	-.007	.017	.007	.0062	.00	.99	
rs1307325	4	103188709	G/T	Prev	1	.325	-.032	1.2e-8	1	.949	-.086	.014	1	.395	-.244	.038	.84	.377	-.131	.16	1	.391	-.139	.65	-.055	1.8e-10	28.09	.24	-.048	1.8e-12	-.051	3.2e-21	14.32	.33	
rs12037308	4	106617136	G/A	Prev	1	.323	-.003	.7	1	.929	.020	.51	1	.94	.004	.331	.48	.99	.044	-.018	.77	.98	.327	.163	.18	-.002	.79	.00	.58	-.001	.97	-.001	.89	.00	.71
rs4833407	4	113311790	C/A	Prev	.99	.352	-.005	.29	.99	.447	-.028	.068	1	.335	-.001	.97	.96	.381	-.030	.25	.99	.470	-.021	.73	-.007	.089	.00	.66	-.016	2.5e-5	-.012	1.8e-5	3.54	.39	
rs4834272	4	113313986	T/C	Prev	.97	.671	-.007	.19	.97	.565	-.026	.095	.94	.735	-.006	.85	.96	.603	.051	.44	1	.408	.081	.00	-.001	1.6e-6	.00	.69	-.012	3.7e-5	-.012	1.6e-5	.00	.68	
rs3749591	4	120214030	T/G	Prev	1	.680	-.010	.05	1	.704	-.012	.22	1	.630	-.037	.022	1	.851	-.034	.34	1	.791	.093	.24	-.013	.0068	14.30	.32	-.010	.012	-.011	.00025	.00	.44	
rs303084	4	124066948	G/A	Prev	.99	.219	.007	.2	.98	.268	-.022	.42	.99	.038	-.034	.42	.99	.579	-.036	.16	.99	.261	.122	.099	.007	.2	42.17	.14	.013	.00072	.011	.00046	35.85	.17	
rs11947381	4	145537850	T/C	Prev	1	.471	-.007	.1																											

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta											
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	I^2	Het	P	Eff	P	I^2	Het	P								
rs6881648	5	74991840	A/C	Prev	.99	.623	.028	1.3e-8	.99	.640	.022	.18	.99	.449	.053	.00084	.99	.507	-.010	.7	.99	.432	.026	.7	.028	1.8e-10	18.57	.3	.025	1.7e-11	.026	2.2e-20	5.27	.38		
rs2307111	5	75003678	T/C	Prev	1	.393	.027	9e-8	.99	.591	.025	.11	1	.446	.056	.00051	1	.177	.015	.64	1	.400	.003	.96	.028	3.8e-11	.00	.5	.028	3.8e-12	.025	2.2e-20	.00	.32		
rs23074091	5	75010002	T/C	Prev	1	.631	.029	9e-9	.99	.644	.020	.21	.98	.442	.049	.00031	.98	.444	-.003	.96	.98	.444	-.003	.96	.029	1.4e-10	.00	.48	.025	9.9e-12	.027	9.6e-21	.00	.38		
rs2112347	5	75013244	C/T	Prev	.99	.632	.029	5.7e-9	.99	.646	.022	.18	.99	.448	.053	.00095	.97	.436	-.012	.64	.97	.445	.006	.93	.029	1e-10	22.17	.27	.026	6.4e-17	.027	3.4e-19	7.04	.37		
rs7713806	5	75034387	C/T	Prev	.98	.620	.025	5.8e-7	.96	.609	.014	.39	.97	.315	.041	.01	.94	.240	.025	.41	.94	.341	-.051	.64	.025	2.6e-8	.00	.7	.022	3.7e-12	.023	4.4e-19	.00	.77		
rs2069664	5	75916434	G/A	Prev	1	.337	-.020	.93	1	.669	-.005	.75	1	.845	-.059	.0067	1	.666	-.091	.18	1	.666	-.091	.18	-.003	.5	55.14	.003	-.001	.83	-.002	.35	44.83	.11		
rs6870983	5	76976333	C/T	Prev	.99	.763	.024	1.7e-5	.99	.803	.007	.7	.98	.981	.050	.38	.99	.372	.054	.037	.99	.645	-.004	.96	.024	4e-6	.00	.65	.018	4.2e-7	.020	8.7e-12	.00	.66		
rs18463974	5	87969927	G/A	Prev	.99	.860	-.031	7.2e-6	.98	.822	-.008	.73	.97	.517	-.003	.84	.99	.783	-.015	.65	.98	.792	-.089	.26	-.025	2.5e-5	1.42	.4	-.017	.00007	-.021	1e-7	.00	.42		
rs16903285	5	87978252	T/C	Prev	.98	.858	-.032	3.3e-6	.97	.822	-.007	.73	.97	.537	-.004	.81	.96	.787	-.015	.65	.96	.799	-.089	.26	-.026	1.4e-5	6.47	.37	-.021	.00019	-.023	1.2e-8	.00	.46		
rs7713337	5	88746025	T/C	Prev	1	.356	-.002	.64	.99	.391	-.012	.42	1	.278	-.016	.34	.97	.209	.039	.23	1	.475	.010	.88	-.001	.8	.00	.54	-.001	.88	-.001	.79	.00	.68		
rs6235	5	95728898	A/G	Prev	1	.712	-.015	.0048	1	.753	.022	.22	1	.699	-.025	.14	1	.733	.019	.51	1	.719	.148	.036	-.011	.017	62.70	.03	-.017	6.5e-7	-.015	4.2e-8	57.20	.00	.639	
rs6234	5	95728898	G/C	Prev	1	.729	-.016	.0023	1	.766	.030	.1	1	.701	-.026	.13	1	.832	-.016	.25	1	.720	.128	.068	-.013	.0069	61.62	.034	-.018	1.1e-5	-.016	3.4e-7	55.06	.00	.64	
rs6234	5	95728897	G/C	Prev	1	.729	-.017	.0015	1	.765	.027	.15	1	.702	-.026	.12	1	.794	-.036	.65	1	.717	.125	.074	-.014	.0029	60.57	.038	-.017	1.3e-7	.017	3.7e-7	52.58	.00	.661	
rs261967	5	95850250	A/G	Prev	1	.592	-.018	.00014	1	.593	-.030	.056	.99	.555	.005	.75	.99	.601	-.006	.83	.99	.583	-.080	.21	-.017	6.1e-5	.00	.43	-.018	4.1e-6	-.017	1e-9	.00	.58		
rs4869139	5	95858668	G/A	Prev	.99	.610	.016	.0013	1	.620	.022	.17	.99	.455	.003	.87	.97	.624	.041	.12	.98	.528	.021	.74	.016	.0003	.00	.78	.015	1.6e-6	-.015	1.6e-6	.00	.88		
rs10062657	5	95867908	C/T	Prev	.96	.100	.022	.0064	.97	.256	.032	.071	.94	.425	.005	.7	.96	.361	-.001	.97	.93	.214	.145	.072	-.020	.0018	7.70	.36	-.015	.012	.017	7.5e-5	.00	.88		
rs30187	5	96124330	T/C	Prev	1	.352	-.017	.00049	1	.393	.016	.3	1	.508	.006	.7	1	.381	-.077	.0027	1	.426	.171	.01	-.014	.0022	79.62	.00059	-.009	.02	-.011	.00016	75.20	.00	.012	
rs40067	5	107439012	G/A	Prev	.99	.831	.022	.00063	.98	.857	.012	.59	.99	.639	-.028	.091	.97	.810	.008	.8	.98	.580	.166	.012	.016	.0045	69.47	.011	.024	7.4e-6	.020	2e-7	67.84	.00	.014	
rs158186	5	107440856	G/A	Prev	.99	.831	.022	.00059	.98	.857	.010	.64	.99	.637	-.029	.079	.97	.797	.008	.8	.98	.580	.166	.012	.016	.0049	70.45	.0089	.026	6.3e-6	.020	2.4e-7	67.11	.00	.0095	
rs10041657	5	108152428	G/A	Prev	1	.770	.004	.53	.99	.811	-.037	.059	1	.909	-.018	.5	.98	.708	-.031	.26	1	.833	.012	.89	-.004	.46	21.94	.27	.005	.14	-.005	.098	3.54	.39	.81	
rs1045706	5	108714298	T/C	Prev	1	.412	-.011	.024	1	.488	-.018	.23	1	.903	-.041	.1	1	.801	-.018	.57	1	.419	.029	.65	-.012	.0056	.00	.74	-.009	.017	-.010	.0003	.00	.81		
rs459552	5	112176756	T/A	Prev	.97	.239	.002	.77	.98	.192	.020	.31	.89	.098	.001	.98	.94	.071	.017	.73	.95	.223	.010	.9	-.003	.55	.00	.93	-.017	1.2e-5	.012	8.3e-5	5.53	.38		
rs10435241	5	118729286	C/T	Prev	1	.723	-.004	.4	1	.730	.002	.9	1	.846	.024	.27	1	.654	.042	.11	1	.762	.058	.46	-.001	.87	18.93	.29	-.001	.79	-.001	.76	.00	.42		
rs4308481	5	12652106	C/T	Prev	.95	.542	.015	.0023	.92	.525	-.059	.00025	.92	.470	.038	.024	.9	.484	-.009	.72	.89	.401	-.057	.41	.019	2.1e-5	61.93	.033	-.012	.0011	.015	1.7e-7	58.57	.00	.034	
rs1582931	5	126657199	G/A	Prev	.99	.531	.014	.003	.97	.506	.054	.00063	.98	.436	.043	.00089	.95	.454	-.016	.55	.97	.378	-.060	.37	.018	3.1e-5	64.01	.025	.013	.00057	.015	9.3e-8	57.83	.00	.037	
rs10051787	5	127732236	T/C	Prev	.98	.292	.019	.00038	.98	.314	.031	.062	.98	.420	.044	.0071	.96	.220	-.009	.78	.96	.350	-.049	.47	.021	1e-5	11.38	.34	.011	.0063	.015	7.4e-7	27.41	.00	.83	
rs4357030	5	124316031	C/T	Prev	1	.226	-.005	.38	1	.195	.004	.84	1	.426	.002	.91	1	.396	-.020	.43	1	.181	.063	.45	-.004	.42	.00	.85	-.010	.032	-.007	.034	.00	.83		
rs8646049	5	124330522	A/G	Prev	.98	.470	-.011	.017	.98	.355	-.009	.54	.93	.319	-.002	.93	.95	.216	-.000	.99	.97	.396	-.051	.45	-.010	.021	.00	.89	-.016	3.6e-7	-.014	3.8e-8	.00	.82		
rs4836133	5	124332103	C/A	Prev	.99	.477	-.012	.011	1	.425	-.009	.54	.93	.319	-.002	.93	1	.244	-.020	.49	.96	.415	-.052	.44	-.012	.0077	.00	.94	-.015	7.2e-6	-.010	3.5e-7	.00	.84		
rs272869	5	131677997	A/G	Prev	1	.381	.009	.075	1	.345	.012	.46	1	.630	-.032	.053	1	.266	-.058	.042	1	.647	.086	.21	.005	.29	66.79	.017	.005	.14	-.005	.068	58.49	.00	.56	
rs3299120	5	133861756	C/T	Prev	.97	.565	.014	.0045	.98	.482	-.015	.35	.97	.617	.007	.68	.98	.502	-.012	.64	.96	.608	-.003	.96	.010	.02	.00	.42	.010	.02	.010	.00067	-.017	9.7e-6	.00	.43
rs13174863	5	139080745	A/G	Prev	.72	.850	-.019	.017	.91	.860	-.030	.2	.65	.931	.008	.84	.83	.929	-.108	.048	.54	.902	-.188	.21	-.021	.044	11.97	.34	-.010	.00067	-.017	9.7e-6	.00	.42		
rs155610	5	135517178	C/G	Prev	.99	.448	.017	.00035	.99	.596	.029	.067	.99	.923	.022	.45	.99	.927	.067	.011	.98	.508	.086	.18	.020	7.4e-6	18.47	.3	.020	6.5e-8	.020	2.2e-12	.00	.43		
rs7715256	5	135537893	G/T	Prev	1	.433	.016	.00076	.99	.576	.023	.13	.99	.921	.015	.6	.96	.393	.031	.24	.98	.482	.114	.077	.018	7.9e-5	.00	.6	.016	1.7e-7	.017	4.9e-10	.00	.73		
rs7708584	5	135343466	A/G	Prev	1	.432	.016	.00081	.99	.570	.022	.15	.99	.922	.015	.6	.96	.393	.031	.24	.98	.482	.114	.077	.018	7.9e-5	.00	.65	.019	3.8e-7	.017	1.9e-10	.00	.77		
rs11058460	5	135354602	G/A	Prev	.91	.474	.015	.0032	.99	.593	.017	.29	.93	.921	.017	.56	.91	.474	.033	.22	.88	.506	.151	.026	.016	.00048	9.86	.35	.016	6e-6	.016	1.1e-8	.00	.49		
rs17472426	5	135694357	T/G	Prev	.95	.916	-.002	.85	.95	.931	-.043	.17	.77	.992	.010	.92	.9	.972	.089	.27	.71	.978	.076	.78	-.006	.51	.00	.59	.044	.56	.000	.93	.00	.62		
rs4688125	5	171281875	C/G	Prev	.88	.406	.007	.2	.87	.353	.023	.2	.91	.363	.013	.44	.95	.422	.021	.44	.85	.243	-.027	.74	-.009	.067	.00	.87	.006	.007	.0089	.00	.92			
rs4688126	5	171281875	T/G	Prev	1	.395	.004	.44	1	.362	.012	.48	1	.362	.012	.48	1	.607	.043	.1	.41	.372	.315	.099	-.007	.75	1.14	.4	.000	.1	-.007	.75	1.14	.4		
rs12513649	5	172472052	G/G	Prev	.37	.992	.003	.95	1	.944	.009	.79	.77	.929	-.033	.34	.42	.995	-.175	.51	.41	.372	.315	.099	-.007	.75	1.14	.4	.000	.1	-.007	.75	1.14	.4		
rs3849724	5	173290977	G/T	Prev	.99	.384	.012	.011	.99	.683	.007	.69	1	.774	.041	.03	.96	.771	-.025	.4	.97	.691	.110	.13	.008	.057	62.48	.031	.01							

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta												
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Eff	P										
rs798489	7	2801803	G/T	Prev	.92	.751	-.002	.77	.94	.784	.020	.3	.85	.845	.052	.028	.91	.925	-.020	.69	.89	.894	.047	.68	.003	.63	.34	.07	.19	.002	.49	.002	.39	17.60	.3		
rs1830074	7	7618674	T/C	Prev	.93	-.721	-.010	.061	.96	.689	-.025	.14	.89	.706	-.047	.035	.1	.93	.033	.020	.47	.93	.036	-.007	.93	-.006	.19	.63	.82	.026	-.018	1.81e-5	-.013	2.7e-5	65.60	.017	
rs9648211	7	16089752	A/G	Prev	1	.378	-.011	.027	1	.524	-.015	.34	1	.299	-.004	.031	1	.783	.001	.97	1	.406	-.031	.64	-.013	.0043	.00	.67	-.001	.81	.007	-.001	.81	.006	.04	21.39	.27
rs2214442	7	20392787	A/G	Prev	.99	.534	-.003	.49	.99	.410	-.018	.25	1	.638	.006	.7	.99	.376	-.047	.079	.97	.304	.066	.35	.004	.41	23.77	.26	.005	.21	.004	.14	5.90	.38			
rs4721902	7	20420151	T/C	Prev	.98	.591	-.004	.37	.98	.519	-.022	.16	.98	.625	.036	.027	.97	.500	-.035	.18	.97	.495	-.000	1	.007	.12	42.63	.14	.002	.65	.004	.17	35.66	.17			
rs10231365	7	20431585	C/T	Prev	.99	.491	-.005	.31	.98	.379	.023	.15	.98	.412	.027	.091	.96	.359	-.056	.037	.99	.290	.023	.75	.006	.15	52.05	.08	.005	.16	.006	.045	40.31	.14			
rs4141278	7	25857525	T/C	Prev	.97	.816	.013	.031	.97	.807	.031	.12	1	.596	.017	.3	.93	.933	.011	.83	.94	.621	-.001	.99	.013	.0065	.00	.94	.002	.61	.006	.047	.00	.48			
rs10245353	7	25858614	C/A	Prev	.97	.815	.013	.034	.97	.807	.031	.12	.99	.597	.016	.32	.93	.932	-.002	.97	.95	.621	-.001	.99	.013	.0081	.00	.93	.002	.59	.006	.049	.00	.51			
rs7798431	7	25860812	G/A	Prev	.99	.757	.012	.028	.98	.579	.020	.21	.98	.579	.020	.21	.99	.636	.028	.37	.98	.554	.051	.43	.016	.0001	.00	.67	.000	.91	.005	.058	41.55	.13			
rs39092751	7	25861639	G/A	Prev	.98	.751	.013	.023	.99	.661	.029	.079	.98	.593	.008	.76	.97	.532	.070	.28	.015	.0051	.00	.78	.000	.003	.00	.78	.000	.93	.005	.076	32.42	.19			
rs1055144	7	25871109	C/T	Prev	1	.815	.012	.042	1	.601	.025	.13	1	.932	.007	.89	1	.932	.007	.89	1	.932	.007	.89	.015	.0051	.00	.86	.002	.63	.006	.044	6.01	.38			
rs6958350	7	25871933	C/T	Prev	1	.750	.013	.022	1	.655	.027	.098	1	.205	.023	.23	1	.499	.037	.14	1	.523	.064	.31	.016	.0013	.00	.68	.000	.91	.006	.05	43.16	.12			
rs10261878	7	25950545	A/C	Prev	.98	.064	-.023	.02	.98	.079	.002	.96	.98	.044	-.007	.86	.99	.523	.001	.97	.96	.059	-.010	.95	-.017	.044	.00	.85	-.023	.0047	-.020	.00508	.00	.9			
rs1534696	7	26397239	C/A	Prev	1	.448	-.001	.79	.92	.432	.027	.1	1	.219	.013	.5	.93	.335	.032	.24	1	.406	.158	.02	.003	.49	57.54	.051	.002	.38	.47	.17	.092				
rs7801581	7	27223771	C/A	Prev	.76	.757	.012	.071	.96	.747	.000	.66	.63	.950	.031	.49	.94	.747	.000	.95	.66	.715	.010	.91	.010	.47	.57	.006	.07	.000	.47	.007	.00	.87			
rs849140	7	28183702	T/C	Prev	1	.398	-.014	.003	1	.402	-.016	.3	1	.299	-.002	.9	.99	.462	.021	.43	1	.511	.050	.44	-.012	.0047	.00	.54	-.009	.0049	-.010	7.8e-5	.00	.61			
rs1708299	7	28188946	A/G	Prev	1	.287	-.011	.041	1	.204	-.016	.31	1	.035	-.018	.68	.99	.127	.016	.68	1	.222	.078	.35	-.010	.037	.00	.79	-.009	.011	-.009	.001	.00	.88			
rs552707	7	28205303	T/C	Prev	1	.281	-.010	.052	1	.203	-.020	.31	.98	.035	-.024	.57	.97	.140	.008	.83	.99	.222	.078	.35	-.010	.037	.00	.79	-.010	.0035	-.010	.00034	.00	.89			
rs481806	7	28207300	G/T	Prev	.99	.285	-.010	.059	.99	.208	-.020	.3	.98	.035	-.026	.55	.97	.143	.015	.69	.99	.229	.065	.43	-.010	.043	.00	.8	-.010	.0032	-.010	.00039	.00	.89			
rs17161076	7	32239565	A/G	Prev	1	.782	-.026	7.5e-6	1	.785	-.005	.81	1	.790	.030	.13	1	.682	-.008	.76	1	.837	-.025	.78	-.020	.00016	52.46	.078	-.019	1.7e-8	40.58	.13					
rs215607	7	32338337	G/A	Prev	.99	.224	.026	4.9e-6	.99	.199	.007	.71	.99	.213	.003	.87	.98	.279	.072	.01	.99	.220	.084	.27	-.024	2.2e-6	36.72	.18	.023	2e-5	.024	2e-10	21.70	.27			
rs7779181	7	32345283	T/C	Prev	1	.776	-.025	8.5e-6	1	.807	-.002	.94	.98	.782	.008	.68	1	.758	-.072	.014	1	.782	-.089	.26	-.023	8.6e-6	46.18	.11	-.019	1e-9	36.39	.16					
rs10269783	7	49616203	G/A	Prev	.98	.605	-.008	.09	.98	.588	-.018	.26	.98	.425	-.035	.033	.94	.746	.007	.81	.98	.518	.063	.33	-.010	.02	6.68	.37	-.014	4.1e-6	-.013	2.7e-7	.00	.43			
rs11765748	7	50615616	T/A	Prev	1	.478	.012	.014	1	.540	.014	.37	.99	.584	.013	.43	.99	.658	.038	.16	.99	.652	-.046	.5	.012	.004	.00	.8	.016	2e-5	.014	3.2e-7	.00	.85			
rs4947644	7	50618876	T/C	Prev	1	.494	.010	.031	1	.455	-.001	.94	1	.520	.017	.28	1	.684	.047	.087	1	.632	.001	.99	.011	.012	.00	.64	.013	.00049	-.012	1.9e-5	.00	.75			
rs6947395	7	69406661	A/T	Prev	.99	.833	-.017	.0072	.99	.865	-.012	.6	1	.807	-.051	.01	.98	.722	.044	.12	.99	.850	.067	.46	-.015	.008	60.20	.04	-.010	.034	-.012	.00085	52.22	.063			
rs1949804	7	69768826	T/C	Prev	1	.954	-.025	.029	.98	.951	.035	.33	.98	.881	-.068	.0052	1	.911	-.016	.72	1	.933	.100	.44	-.026	.0067	42.48	.14	-.026	.0019	-.026	3.8e-5	28.10	.22			
rs38314	7	70067315	G/A	Prev	1	.514	.003	.57	1	.634	.002	.9	1	.819	.003	.89	1	.555	.016	.54	1	.714	.014	.85	-.003	.49	.00	.99	.014	.00028	-.009	.0014	.00	.59			
rs6976930	7	72885810	G/A	Prev	1	.816	-.013	.028	1	.858	-.035	.12	1	.906	-.009	.75	1	.664	.015	.58	1	.876	.010	.92	-.013	.018	.00	.72	-.009	.017	-.011	.00089	.00	.79			
rs1167827	7	75163169	A/G	Prev	.92	.445	-.017	.00078	.96	.567	-.002	.88	.83	.878	-.031	.23	.8	.220	-.001	.99	.89	.474	-.050	.47	-.016	.00661	.00	.86	-.020	6.3e-10	-.019	3.1e-12	.00	.83			
rs73144267	7	76552745	T/C	Prev	.77	.836	-.017	.019	.98	.692	-.012	.51	1	.82	.648	-.025	.17	.66	.738	.041	.25	.73	.680	.037	.63	-.016	.011	.00	.56	-.021	1.1e-5	-.019	5.2e-7	.00	.63		
rs7804790	7	76680753	C/T	Prev	.72	.176	.014	.064	.9	.288	.018	.31	.73	.337	.051	.0087	.72	.99	.086	.091	.82	.902	.018	.82	.019	.0024	20.36	.28	.021	9.9e-6	.020	8.4e-8	1.11	.41			
rs9245368	7	76680143	C/T	Prev	.64	.186	.017	.024	.92	.315	.017	.32	.67	.490	.013	.5	.82	.177	.013	.72	.59	.337	-.019	.83	.016	.011	.00	.99	.032	3.2e-8	.025	5e-9	.00	.64			
rs2430307	7	76690941	T/C	Prev	.64	.186	.017	.025	.92	.315	.016	.34	.67	.490	.013	.5	.82	.177	.011	.76	.58	.337	-.019	.83	.016	.012	.00	.99	.036	2.5e-7	.025	8.4e-8	.00	.49			
rs6955651	7	76639871	T/C	Prev	.57	.302	.015	.035	.73	.414	.019	.29	.57	.469	.034	.11	.63	.175	.066	.12	.51	.412	.043	.64	.018	.0033	.00	.7	.041	1.3e-7	.027	2.5e-8	34.06	.18			
rs3930017	7	76720582	A/G	Prev	.95	.411	-.000	.99	.73	.282	.011	.59	.93	.132	.001	.98	.62	.298	-.028	.43	.95	.238	-.155	.041	-.001	.91	21.30	.28	-.015	1.5e-6	.013	2.4e-7	63.34	.018			
rs3770273	7	77288040	G/A	Prev	.99	.590	.010	.045	.99	.601	.021	.18	1	.539	-.002	.92	.99	.623	.019	.47	1	.470	-.112	.079	.009	.032	16.92	.31	.015	1.5e-6	.013	2.4e-7	14.63	.32			
rs42377	7	92243672	G/A	Prev	1	.685	.004	.42	1	.705	-.008	.62	1	.832	.000	.99	1	.600	-.010	.71	1	.833	.217	.014	.003	.5	40.08	.15	.003	.48	.003	.33	25.11	.25			
rs10269774	7	92253972	G/A	Prev	1	.650	.001	.89	1	.612	-.003	.84	1	.872	.008	.73	1	.599	-.002	.94	1	.812	.200	.013	.001	.8	35.79	.18	.004	.38	.003	.41	21.55	.27			
rs2327570	7	93095867	T/C	Prev	1	.518	-.011	.021	1	.530	-.021	.19	1	.605	-.030	.062	.99	.710	.028	.33	1	.532	-.033	.6	-.012	.0047	.00	.45	-.017	4.3e-6	-.015	9.8e-8	.00	.69			
rs2301680	7	93116290	A/G	Prev	1	.499	-.009	.05	1	.654	-.022	.15	1	.921	.013	.45	1	.405	.016	.53	.99	.439	.012	.86	-.016	.024	.00	.77	-.016	9.3e-6	-.014	1.3e-6	.00	.47			
rs9641123	7	93197732	G/C	Prev	.99	.591	-.011	.02	.99	.687	-.018	.28	.99	.703	.008	.65	.98	.881	.000	1	.99	.610	-.089	.18	-.012	.0083	.00	.81	-.019	.5e-							

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta										
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Eff	P								
rs125440058	8	72492238	T/G	Prev	.99	.936	.003	.73	1	.588	.022	.17	.98	.842	-.045	.2	.99	.858	.171	.066	.011	.15	.4741	.11	-.012	.037	-.003	.49	.62	.82	.02				
rs1260739536	8	72514228	T/G	Prev	1	.752	.021	.018	.99	.579	.011	.47	.98	.286	-.001	.93	.99	.430	.083	.009	.1	.320	.053	.42	.013	.0078	.005	.725	.21	.23	.27				
rs7435692	8	76013663	A/G	Prev	.99	.585	.021	1.2e-5	.98	.498	.020	.2	.97	.435	.081	.0013	.99	.416	-.036	.57	.024	.33e-8	.4736	.11	.024	.33e-8	.005	.07e-17	.34	.49	.18				
rs286857369	8	760697034	T/C	Prev	1	.786	.018	.0023	.99	.747	-.055	.0028	.99	.743	-.063	.0029	.99	.819	-.030	.77	.023	1.1e-5	.3218	.21	.023	.0032	-.017	.38e-7	.38	.50	.15				
rs2877341	8	76277925	T/C	KP	.99	.303	-.029	1.9e-8	.97	.99	.420	-.050	.0019	.94	.085	-.002	.97	.98	.535	.062	.36	-.030	1.1e-10	.00	.43	-.026	.43e-10	.00	.49	.00	.49				
rs174036819	8	768060584	T/C	Prev	1	.698	.027	1.2e-7	.99	.707	.029	.094	1	.581	.052	.0013	.98	.917	.008	.86	.96	.064	-.062	.36	.029	.7e-10	.025	.92e-20	.8	.16	.36				
rs13815600	8	76873699	A/G	Prev	.98	.505	.024	6e-7	.98	.222	.037	.052	.94	.142	.022	.35	.96	.400	-.022	.74	.023	1.7e-7	.00	.73	.021	.38e-8	.022	.34e-10	.00	.83	.00				
rs160017521	8	81375457	C/T	Prev	.99	.892	.020	.0081	.98	.918	-.016	.38	.96	.802	.045	.024	.91	.921	.045	.36	.97	.795	.140	.096	.022	.0011	.2539	.129	.12e-9	.29	.66	.21			
rs1438420	8	81438420	C/T	Prev	.99	.750	.017	.0025	.98	.762	.008	.66	.99	.721	.026	.15	.97	.332	.008	.77	.99	.685	.113	.12	.017	.00066	.007	.12e-6	.00	.48	.81				
rs733594	8	85077686	C/T	Prev	.98	.273	-.017	.0021	.98	.279	-.003	.68	.94	.374	-.000	.98	.98	.481	-.054	.033	.96	.262	-.014	.86	-.016	.001	.00	.00	.48	.00	.61				
rs2033732	8	850797328	A/G	Prev	.98	.250	-.012	.031	.98	.233	-.007	.67	.94	.364	-.003	.85	.94	.138	-.008	.83	.95	.246	-.010	.89	-.011	.036	.00	.00	.97	.00	.77				
rs4366055	8	95507328	A/G	Prev	.99	.751	.016	.0039	.99	.607	.017	.29	.99	.530	-.019	.22	.99	.693	.025	.37	.98	.699	.071	.32	.012	.014	.00055	.013	.28e-5	.29	.44	.15			
rs13680842	8	95582606	A/G	Prev	.97	.674	.006	.27	.98	.569	.016	.29	.97	.522	-.024	.13	1	.834	-.016	.63	.96	.647	.064	.37	.004	.38	1.7e-5	.011	.68e-5	.37	.75	.21			
rs3134353	8	101947455	A/G	Prev	1	.390	-.009	.058	1	.368	-.019	.23	.98	.359	-.010	.53	.98	.232	-.041	.18	1	.290	-.064	.37	-.011	.011	.00	.76	-.015	1e-6	.00	.69			
rs38602177	8	118185025	G/A	Prev	1	.695	-.001	.9	1	.735	-.018	.29	1	.556	-.019	.25	1	.888	.002	.95	1	.775	-.145	.056	-.001	.78	.3382	.2	-.010	.0042	-.007	.013	.35	.51	
rs2001945	8	126477978	C/T	Prev	1	.485	-.007	.14	1	.510	-.029	.06	1	.460	-.001	.95	1	.222	-.061	.043	1	.537	.017	.8	-.009	.031	.2383	.26	-.009	.00033	.5	.14	.38		
rs378854	8	128323819	C/T	Prev	.99	.645	-.002	.69	1	.644	-.004	.08	.8	.99	.597	-.039	.014	.98	.779	.007	.81	.98	.585	.082	.21	-.004	.32	.41	.15	-.004	.32	.00	.44		
rs6470765	8	130736697	A/G	Prev	1	.801	-.004	.51	1	.658	-.012	.45	1	.304	-.045	.0094	1	.365	.005	.84	1	.599	.006	.93	-.008	.12	.2550	.25	-.005	.24	.00	.93			
rs148076010	9	2277605	A/G	Prev	.76	.959	.008	.56	.71	.976	-.156	.0086	.57	.995	-.333	.024	.71	.991	.119	.44	6	.976	-.344	.21	-.003	.82	.7239	.0059	-.000	.98	-.001	.88	.65	.013	
rs7042428	9	8262414	A/G	Prev	.94	.981	.007	.71	.91	.982	.026	.67	.86	.999	.257	.32	.92	.938	.071	.19	.77	.998	1.368	.14	.015	.36	.00	.54	-.009	.47	-.000	.99	.00	.48	
rs4741510	9	15591372	T/A	Prev	.99	.578	.015	.0022	.94	.578	.015	.93	1	.417	-.006	.7	.93	.876	-.018	.64	.99	.595	.053	.43	.012	.0066	.00	.55	.016	.23e-5	.00	.62			
rs4740619	9	15634326	T/C	Prev	.99	.544	.015	.0021	.98	.415	-.011	.47	.99	.251	-.002	.92	.95	.534	.011	.68	.96	.468	.045	.5	.012	.0069	.00	.5	.018	.46e-9	.00	.46			
rs1539172	9	15784631	A/G	Prev	1	.508	-.008	.11	1	.610	-.009	.56	1	.628	-.003	.84	1	.461	.001	.95	1	.427	-.043	.52	-.007	.086	.00	.97	.013	.00054	.00	.93			
rs10968577	9	15888706	G/A	KP	.99	.134	.037	1.2e-7	.99	.118	.016	.51	.99	.042	.048	.23	.98	.295	.025	.37	.99	.074	.024	.84	.035	.5e-8	.00	.92	.014	.023	.42e-8	.28	.33	.22	
rs7020996	9	22129579	C/T	Prev	1	.865	.009	.19	1	.857	.010	.52	1	.645	.010	.52	1	.667	-.008	.76	1	.879	-.051	.6	.007	.25	.00	.85	-.004	.44	-.001	.89	.00	.62	
rs10811661	9	22134094	T/C	Prev	1	.824	.010	.11	1	.850	-.036	.094	1	.607	.011	.51	1	.925	-.026	.59	1	.856	-.043	.63	.006	.26	.2082	.28	-.004	.33	.42	.60	.12		
rs1934100	9	23234308	A/T	Prev	.95	.685	.008	.14	.93	.672	.002	.9	.92	.833	-.009	.68	.94	.296	-.027	.34	.92	.573	.015	.83	.005	.26	.00	.73	.008	.077	.007	.038	.00	.83	
rs10811901	9	23236935	G/A	Prev	1	.435	-.010	.042	.99	.382	.009	.59	.99	.192	-.009	.67	.98	.710	-.018	.54	1	.414	.009	.88	-.008	.056	.00	.85	.010	.0019	.00	.92	.00		
rs2183924	9	28412078	C/T	Prev	1	.687	.029	1.2e-8	.99	.733	-.008	.67	.99	.737	.013	.47	.98	.710	-.018	.52	.99	.723	.027	.71	.026	1.9e-8	.00	.71	.025	.68e-14	-.025	.68e-21	.00	.82	
rs10968576	9	28414339	A/G	Prev	1	.691	.029	3e-8	1	.746	.014	.43	1	.830	-.016	.44	1	.815	-.014	.65	1	.778	-.019	.82	-.027	2.4e-8	.00	.9	.025	.64e-14	-.025	.64e-21	.00	.95	
rs10968577	9	28415512	C/T	Prev	1	.688	-.030	6e-9	1	.739	-.010	.57	1	.728	-.014	.42	.99	.022	.003	.92	.99	.725	.029	.68	-.027	1.3e-8	.00	.61	.025	.53e-12	-.026	.42e-19	.00	.74	
rs16938312	9	36969205	G/T	Prev	.96	.354	-.005	.36	.99	.347	-.008	.63	.95	.200	.009	.67	.98	.637	.021	.44	.92	.319	.031	.66	-.003	.48	.00	.82	-.008	.056	-.006	.062	.00	.82	
rs11142387	9	72998332	A/C	Prev	.99	.459	.001	.85	.98	.461	.033	.036	.99	.620	-.002	.9	.98	.617	.025	.34	.98	.365	.023	.74	.004	.39	.1520	.32	-.008	.33	.42	.60	.12		
rs11144688	9	78542286	G/A	Prev	1	.875	-.002	.82	.94	.895	-.018	.49	1	.949	-.005	.89	.92	.962	.076	.26	1	.329	-.008	.95	-.002	.75	.00	.79	-.008	.16	.50	.80	.81		
rs10868215	9	87234111	A/C	Prev	1	.628	-.006	.19	1	.683	.050	.0026	1	.701	-.022	.2	1	.627	.030	.25	1	.660	.007	.41	-.008	.062	.6088	.037	-.002	.58	.002	.4	.62	.43	.021
rs1147199	9	87275895	A/G	Prev	1	.198	-.009	.15	1	.187	-.038	.06	1	.208	.020	.31	1	.206	.010	.27	1	.256	.055	.94	-.008	.16	.2632	.25	-.017	.00027	-.013	.00024	.30	.34	.21
rs80068415	9	92093127	T/C	Prev	.83	1.000	.237	.26	.92	.999	-.078	.78	.17	1.000	---	1	.97	.994	.202	.23	1	1.000	-.Inf	.1	.216	.1	.00	.9	.000	.1	.216	.1	.00	.9	
rs2398893	9	96758342	A/G	Prev	1	.723	.004	.4	1	.693	.030	.07	1	.900	.002	.95	1	.611	-.020	.44	1	.794	-.057	.45	-.005	.26	.00	.42	-.006	.073	.006	.037	.00	.56	
rs12236219	9	97062981	C/T	Prev	.98	.954	.013	.25	.99	.838	.010	.65	1	.633	-.030	.065	.96	.917	-.005	.91	.96	.853	.267	.0041	.019	.027	.5174	.082	.019	.0029	.39	.67	.14		
rs4932549	9	97073588	A/C	Prev	.96	.327	.011	.033	.97	.372	-.024	.16	.94	.392	-.024	.16	.94	.334	.029	.29	.92	.290	-.122	.1	.007	.16	.5414	.068	.002	.63	.004	.2	.46	.51	.096
rs4739902	9	98256235	C/T	Prev	.99	.918	.003	.73	.82	.949	.003	.93	.52	.988	.034	.73	.79	.981	-.106	.31	1	.992	-.529	.15	-.003	.76	.00	.75	-.013	.046	-.007	.16	.00	.51	
rs10999303	9	98410405	C/T	Prev	.88	.774	.016	.0076	.87	.717	.011	.54	1	.618	.009	.56	.85	.767	-.014	.67	.84	.667	.130	.083	.015	.0566	.00	.5	.010	.0087	-.011	.00017	.00	.56	
rs1443438	9	100550028	T/C	Prev	1	.332	.004	.46	1	.294	-.017	.32	1	.127	.003	.46	.99	.106	-.045	.16	1	.236	-.007	.92	.001	.82	.00	.48	.002	.65	.001	.63	.00	.62	
rs1845432	9	100760113	G/T	Prev	.99	.782	.002	.71	.97	.763	.015	.42	1	.880	-.026	.28	.99	.681	.017																

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta		
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Het	P
rs1277723	10	18554623	G/A	Prev	1	.221	-0.017	.0038	1	.279	-0.010	.6	1	.185	.027	.42	1	.224	-.032	.66	-.013	.01	-.0001	-.012	7.6e-5	.00	.62
rs12912454	10	18584792	A/G	Prev	1	.810	-0.010	.11	1	.836	-.002	.94	1	.936	-.015	.77	1	.776	-.024	.76	-.011	.056	.00	.00	.00	.00	.64
rs127702228	10	21783634	G/A	KP	.96	.667	-.030	4.8e-9	.92	.970	-.024	.62	.96	.884	-.059	.14	.96	.749	-.098	.19	-.028	6.7e-9	16.90	.31	-.011	.0003	.03
rs17019823	10	22036491	A/C	Prev	1	.977	-.051	.0013	.98	.978	-.022	.67	.78	.989	-.086	.77	.96	.935	.121	.021	.6	.051	.00049	46.69	.15	.006	.69
rs7003144	10	22057405	A/C	Prev	1	.977	-.048	.0012	.98	.978	-.025	.64	.94	.936	.129	.014	1	.992	-.192	.6	.049	.00075	53.64	.12	.004	.76	.026
rs12257323	10	22494143	C/T	Prev	.99	.978	-.031	.054	.99	.997	-.040	.36	.98	.998	-.013	.67	.97	.987	-.028	.77	.023	.085	28.20	.24	.003	.85	.16
rs2274741	10	27303605	A/T	Prev	1	.858	-.012	.067	1	.824	-.005	.8	1	.791	-.075	.016	1	.680	.023	.73	-.015	.013	9.93	.35	-.015	.00052	.49
rs10829163	10	27317840	C/T	Prev	1	.858	-.012	.074	1	.825	-.002	.94	1	.791	-.073	.018	1	.681	.028	.67	-.014	.016	13.84	.33	-.016	.00024	.05
rs7081678	10	31990623	G/A	Prev	.99	.925	-.024	.0074	.97	.902	-.001	.98	.95	.971	-.015	.76	.92	.965	-.005	.37	.99	.973	.034	.87	-.012	.0092	.00
rs2163188	10	524	-0.016	.0008	1	.572	-.013	.4	1	.688	-.024	.16	1	.478	.005	.84	1	.585	-.078	.25	-.016	.00023	.00	.77	-.015	5e-5	.87
rs80117551	10	69834828	C/T	Prev	.75	.997	-.023	.64	.94	.946	-.001	.97	.95	.707	.007	.91	.95	.898	-.008	.94	-.015	.32	.00	.95	.000	1	.015
rs3085142	10	76854564	C/T	Prev	.99	.585	-.007	.13	1	.847	-.026	.091	.99	.114	-.034	.17	.98	.522	-.019	.78	-.005	.24	30.60	.22	-.008	.04	.007
rs2116830	10	78646536	G/T	Prev	1	.802	-.006	.3	1	.847	-.007	.75	1	.934	-.015	.76	1	.949	-.032	.83	.006	.31	.00	.98	-.007	.11	.00
rs780159	10	80907147	A/G	Prev	.45	.381	-.012	.094	.94	.342	-.022	.2	.44	.207	-.069	.018	.87	.188	-.012	.74	-.42	.307	.69	59.81	.041	.006	.054
rs7903554	10	87355751	C/G	Prev	1	.944	-.037	.00035	.99	.920	-.016	.56	1	.813	.038	.062	.99	.966	.159	.39	-.020	.02	66.55	.018	-.033	2.3e-5	.021
rs7899106	10	87410904	A/G	Prev	.98	.952	-.041	.00022	.99	.961	-.044	.27	.86	.988	.071	.37	.97	.977	.186	.43	-.038	.00024	.00	.55	-.040	3e-8	.69
rs1832886	10	94477539	G/A	Prev	.99	.627	-.012	.015	.99	.583	-.015	.34	.94	.220	-.009	.64	.97	.879	-.101	.0094	.97	.447	.033	.61	-.013	.0037	.22
rs7923837	10	94481917	G/A	Prev	.99	.621	-.012	.011	.99	.578	-.015	.33	1	.204	-.008	.69	.98	.884	-.120	.0023	.99	.442	.029	.66	-.014	.0025	.49
rs10786152	10	95893514	A/G	Prev	.98	.544	-.001	.83	.98	.449	-.004	.82	.95	.331	.001	.96	.96	.503	-.002	.94	.96	.544	-.025	.71	-.001	.477	.00
rs12569457	10	99096676	C/T	Prev	.94	.983	-.015	.42	.9	.982	-.081	.18	.95	.893	-.004	.88	.72	.982	.018	.87	.93	.952	.061	.7	-.005	.74	.00
rs11189413	10	9996568	A/G	Prev	1	.681	.023	7.6e-6	1	.652	.013	.42	1	.855	.048	.18	1	.559	.079	.23	.023	1.1e-6	.00	.81	.012	.0032	.016
rs11983864	10	100017453	T/C	Prev	.96	.644	.021	3.6e-5	1	.553	.007	.65	9	.428	.002	.91	1	.870	.041	.28	.92	.498	.058	.39	.019	4.4e-5	.00
rs17094222	10	102395440	T/C	Prev	.86	.777	-.024	7.4e-5	.87	.765	-.025	.35	.87	.559	.023	.18	.94	.927	-.056	.26	.82	.618	-.037	.62	-.022	2.2e-5	.00
rs2495707	10	102425049	A/G	Prev	.85	.745	.025	3.3e-5	.94	.675	.016	.35	.99	.342	-.005	.78	1	.559	.012	.63	.99	.467	.190	.0029	.010	.019	.65
rs8262030	10	104327584	A/G	Prev	.99	.578	-.011	.021	.99	.459	-.025	.099	.99	.342	-.005	.78	1	.559	.012	.63	.99	.467	.190	.0029	.010	.019	.65
rs7917772	10	10457443	G/A	Prev	.96	.360	.006	.21	.97	.478	.018	.25	.98	.511	.032	.042	.93	.383	.034	.21	.94	.559	-.136	.035	.009	.036	.53
rs284860	10	104572963	T/C	Prev	.98	.411	.004	.42	1	.408	.023	.17	.97	.564	.013	.42	.94	.368	.022	.74	.006	.15	.00	.60	.013	1.8e-5	.00
rs6163	10	104596924	C/A	Prev	1	.606	-.003	.61	1	.594	-.023	.15	1	.631	-.015	.58	1	.633	.020	.75	-.006	.21	.00	.66	-.017	1.8e-7	.00
rs4409766	10	104616663	G/A	Prev	1	.903	-.025	.0015	1	.836	-.054	.0097	.99	.734	-.040	.026	1	.786	.027	.73	.030	9.5e-6	.00	.63	-.028	5.2e-8	.00
rs11191514	10	104776364	C/T	Prev	.99	.911	-.034	4.8e-5	1	.747	-.044	.017	.99	.940	-.093	.082	1	.797	.075	.35	-.037	1.5e-7	.00	.46	-.030	2.9e-8	.00
rs11191560	10	104783038	T/C	Prev	1	.912	-.033	8.6e-5	.98	.852	-.056	.013	.99	.960	-.123	.059	1	.792	.073	.36	-.037	2e-7	15.86	.31	-.031	8.4e-9	.00
rs11191580	10	104906211	T/C	Prev	1	.753	-.043	.015	1	.753	-.043	.015	1	.753	-.043	.015	1	.753	.073	.36	-.038	1.5e-7	27.93	.24	-.031	1.1e-8	.00
rs7903146	10	114758349	C/T	Prev	.99	.702	.035	.0036	1	.737	.034	.015	.98	.993	.002	.96	.99	.686	.148	.031	.017	.007	.28	.34	.021	3.3e-14	.27
rs12255372	10	114808002	G/T	Prev	1	.711	.013	.01	1	.755	.022	.24	.96	.968	.041	.68	1	.743	.090	.23	.015	.027	.00	.81	.022	3.7e-10	.00
rs16718358	10	115189239	A/G	Prev	.58	1.000	.215	.17	.84	.998	-.247	.24	.66	1.000	-.238	.72	.94	.909	-.1537	.37	.034	.57	35.10	.21	.000	.3	.034
rs10868017	10	118672531	C/A	Prev	.98	.756	-.017	.0024	.98	.700	-.040	.02	.99	.610	-.007	.65	.97	.535	.014	.58	-.016	.0012	56.34	.057	-.014	5.3e-5	.00
rs1907224	10	122897969	G/A	Prev	.86	.024	-.024	.15	.98	.118	-.019	.42	.97	.330	-.027	.11	.96	.445	-.088	.00054	.74	.071	.016	.91	.001	.9	76.83
rs2257129	10	122898697	T/C	Prev	.85	.025	.024	.15	.98	.118	-.019	.42	.97	.330	-.027	.11	.96	.445	-.088	.00054	.74	.071	.016	.91	.001	.9	76.83
rs7090307	10	123234492	T/C	Prev	.99	.655	.007	.14	.98	.668	.046	.0032	.99	.670	.055	.0013	.97	.551	.014	.6	.99	.689	-.000	1	.014	.0017	65.81
rs1968079	10	125251751	T/C	Prev	1	.756	.009	.11	1	.660	-.039	.017	1	.684	-.054	.0016	.98	.727	-.008	.8	.99	.721	.044	.54	.015	.0023	57.18
rs1615589	10	126695673	G/A	Prev	.89	.631	-.017	.0018	.98	.603	-.038	.017	.91	.760	-.008	.67	1	.438	-.036	.16	.84	.573	.004	.95	-.019	7.1e-5	.00
rs2946994	10	126714714	G/A	Prev	.98	.510	-.015	.0018	1	.592	.009	.54	.99	.355	.003	.86	1	.597	-.001	.95	.98	.588	-.006	.92	-.013	.0024	.00
rs3781409	10	126715629	A/G	Prev	.98	.728	-.010	.071	1	.735	-.026	.14	.99	.762	-.012	.53	.99	.887	-.057	.11	.95	.779	.075	.35	-.012	.017	.00
rs7126805	11	828916	G/A	Prev	.46	.286	-.009	.25	.86	.247	-.042	.027	.38	.294	.008	.78	.88	.476	.001	.96	.41	.341	.032	.77	-.011	.094	.00
rs231906	11	2752609	G/A	Prev	.48	.424	-.005	.5	.94	.449	-.027	.09	.46	.593	-.001	.98	.84	.348	.015	.59	.45	.457	-.088	.35	.001	.92	11.05
rs2237892	11	2839751	C/T	Prev	.35	.906	-.000	.98	1	.816	-.071	.00028	.93	.993	-.020	.81	.92	.888	-.025	.56	.33	.862	-.044	.78	-.024	.027	54.42
rs60808706	11	2857233	G/A	Prev	.33	.915	-.011	.46	1	.820	-.075	.00018	.98	.929	.032	.51	.84	.824	-.023	.53	.33	.852	.092	.54	-.017	.13	70.30
rs2237897	11	2858546	C/T	Prev	.33	.923	-.014	.38	.93	.830	-.073	.00047	.96	.929	.037	.46	.81	.905	-.039	.41	.32	.860	.143	.36	-.015	.21	70.26
rs16937956	11	8404501	A/G	Prev	1	.628	.009	.058	1	.565	.002	.9	.99	.432	-.023	.16	1	.715	-.027	.34	1	.506	.048	.45	.006	.21	26.53
rs4929949	11	8604593	T/C	Prev	1	.502	-.011	.017	1	.508	-.012	.44	.99	.584	.008	.63	1	.579	.011	.66	.99	.655	-.099	.15	-.010	.023	.00
rs4929923	11	8639200	T/C	Prev	.99	.371	-.012	.013	.98	.424	-.029	.06	.99	.616	.022	.19	.97	.440	.038	.15	.99	.481	-.059	.36	-.010	.025	57.69
rs4929927	11	8658485	A/G	Prev	1	.358	-.012	.012																			

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta													
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Eff	P											
rs2077177	12	54418857	T/C	Prev	.97	.590	.002	.72	.96	.584	-.029	.064	.96	.382	.014	.39	.589	.482	-.058	.028	.9	.625	.071	.31	-.001	.79	60.37	.039	.001	.85	-.000	.98	50.97	.07				
rs7541533	12	54418920	C/A	Prev	.99	.639	.004	.47	.99	.640	-.026	.11	.99	.377	.014	.36	.99	.840	-.005	.96	.1	.738	.088	.24	.002	.6	20.53	.29	.002	.36	-.002	.43	.58	.41				
rs10876328	12	54421476	C/A	Prev	.1	.636	.005	.31	.1	.635	-.013	.015	.96	.372	.014	.36	.1	.738	-.005	.96	.1	.730	.070	.34	.002	.62	51.79	.081	.000	.97	.001	.72	40.63	.13				
rs2071449	12	54428611	C/A	Prev	.97	.639	.005	.33	.97	.643	-.029	.078	.94	.378	.013	.42	.96	.836	.002	.95	.35	.737	.089	.23	.003	.49	29.10	.42	.000	.92	.001	.63	13.24	.32				
rs3809128	12	56709919	C/T	Prev	.32	.987	.018	.63	.48	.948	.046	.62	.92	.848	.014	.52	.34	.936	.328	.076	.43	.939	.185	.36	.018	.33	.00	.42	.000	.1	.018	.33	.00	.42				
rs7307410	12	65542678	C/G	Prev	.1	.258	.012	.03	.1	.262	-.006	.72	.96	.020	.047	.42	.99	.321	-.034	.22	.1	.152	.100	.22	.009	.068	17.23	.3	.005	.23	.007	.035	3.86	.39				
rs7970350	12	66360164	C/T	Prev	.1	.495	.006	.23	.1	.412	-.010	.52	.5	.997	.016	.72	.51	.996	-.192	.52	.54	.984	.020	.78	.010	.4	.00	.95	.44	.002	.87	-.007	.56	.00	.94			
rs61754230	12	72179446	C/T	Prev	.6	.984	-.018	.48	.65	.985	-.029	.72	.5	.997	.016	.72	.51	.996	-.192	.52	.54	.984	.020	.78	.010	.4	.00	.95	.44	.002	.87	-.007	.56	.00	.94			
rs10777237	12	90643524	T/C	Prev	.98	.279	.005	.33	.98	.348	.026	.11	.99	.395	.044	.0071	.96	.335	-.015	.58	.95	.325	.020	.78	.010	.438	43.48	.13	.021	8.36	-.016	4.66	50.25	.074				
rs11068539	12	90671038	A/G	Prev	.66	.516	-.001	.9	.66	.554	.012	.53	.78	.610	.025	.17	.75	.606	.004	.99	.59	.479	.005	.96	.003	.66	.00	.71	.006	.1	.005	.11	.00	.79				
rs11109072	12	97901270	C/A	Prev	.95	.965	.006	.66	.99	.905	.003	.92	.96	.761	.041	.029	.98	.757	-.017	.57	.93	.880	-.043	.68	.012	.22	.00	.42	.012	.21	.012	.79	.00	.56				
rs12229654	12	11141461	T/G	Prev	.34	.997	.021	.78	.45	.994	.128	.39	.85	.813	.020	.36	.99	.997	-.164	.64	.39	.981	.204	.59	.021	.3	.00	.85	.000	.85	.000	.00	.56	.00	.56			
rs3184504	12	111884608	T/C	Prev	.1	.494	-.020	2.9e-5	.1	.333	.001	.93	.1	.927	.043	.36	.1	.118	.023	.55	.1	.121	.064	.55	.017	.00017	20.96	.28	.014	9.36	-.015	5.8e-9	6.86	.37				
rs11065987	12	112072424	A/G	Prev	.1	.565	.017	.0003	.1	.976	-.032	.94	.1	.976	-.032	.94	.1	.904	-.172	.099	.95	.011	28.96	.23	.015	3.9e-9	11.27	.34	.015	5.8e-9	6.86	.37	.34	.015	5.8e-9	6.86	.37	
rs671	12	112241766	G/A	Prev	.41	1.000	.409	.016	.45	.973	-.011	.88	.99	.785	.017	.37	.45	.996	.253	.36	.41	.991	.034	.81	.021	.25	51.50	.1	.000	1	.021	.25	51.50	.1	.000	1		
rs7305242	12	112256762	T/C	Prev	.89	.996	.070	.07	.92	.893	-.011	.61	.9	.440	.011	.49	.92	.935	.034	.81	.012	.33	.000	.52	.000	.1	.012	.33	.000	.1	.012	.33	.000	.52	.000	.1		
rs17630235	12	112591686	G/A	Prev	.1	.571	.019	.0011	.1	.701	.004	.8	.89	.974	.023	.66	.99	.899	-.021	.62	.1	.903	.151	.14	.017	.00025	4.93	.38	.016	6.4e-7	.016	5e-10	.00	.51	.016	5e-10	.00	.51
rs2301712	12	112641377	T/G	Prev	.1	.983	.015	.41	.1	.859	.012	.63	.1	.396	.022	.17	.1	.841	.008	.81	.1	.910	.029	.81	.012	.24	.00	.82	.034	.13	.012	.24	.00	.82	.034	.13		
rs729062	12	113687859	A/G	Prev	.99	.934	-.003	.74	.99	.935	-.025	.43	.95	.966	.128	.077	.99	.949	-.146	.32	.95	.995	.160	.75	.022	.41	.00	.61	.000	.1	-.022	.41	.00	.61	.000	.1		
rs56214831	12	117977550	C/T	Prev	.8	.991	-.028	.31	.84	.992	.060	.53	.38	.997	.148	.57	.8	.995	.160	.75	.022	.41	.00	.61	.000	.1	-.022	.41	.00	.61	.000	.1	-.022	.41	.00	.61		
rs122396395	12	122396395	C/T	Prev	.1	.704	.012	.027	.1	.664	.042	.0099	.1	.532	-.004	.78	.99	.931	-.048	.27	.1	.671	.059	.4	.012	.013	46.13	.12	.005	.16	.008	.0082	40.89	.13	.005	.16		
rs11765261	12	122405912	G/T	Prev	.98	.703	.012	.024	.1	.662	.043	.0089	.98	.540	-.002	.9	.1	.868	-.058	.11	.97	.674	.067	.35	.012	.013	56.79	.055	.006	.16	.008	.0071	50.73	.071	.006	.16		
rs1169081	12	122617989	A/G	Prev	.93	.602	.008	.13	.1	.601	-.001	.96	.85	.632	-.007	.67	.1	.511	.002	.93	.87	.626	.013	.86	.006	.2	.00	.92	.005	.27	.005	.091	.00	.97	.005	.27		
rs11057405	12	122781897	G/A	Prev	.79	.906	.023	.014	.83	.918	.060	.051	.52	.981	.089	.26	.75	.974	.031	.74	.67	.931	.025	.88	.026	.003	.00	.64	.031	2e-8	.029	2.9e-10	.00	.74	.031	2e-8		
rs10846664	12	122823777	A/G	Prev	.98	.252	.012	.036	.98	.280	-.023	.18	.94	.166	.029	.18	.1	.166	.012	.72	.97	.181	.003	.98	.010	.051	7.73	.36	.018	7.2e-7	.015	2.8e-7	15.58	.31	.018	7.2e-7		
rs4319547	12	123079035	A/G	Prev	.99	.263	-.011	.038	.99	.324	-.049	.0033	.99	.164	.029	.18	.99	.133	.013	.72	.97	.206	.035	.68	.012	.017	57.13	.053	.017	1.3e-6	.015	1e-7	50.00	.075	.017	1.3e-6		
rs34149579	12	123345509	T/C	Prev	.68	.942	.016	.18	.1	.976	-.009	.85	.74	.65	.985	.001	.99	.62	.985	-.223	.51	.015	.2	.00	.96	.019	.00	.96	.019	.00	.96	.019	.00	.96	.019	.00		
rs12317176	12	124044718	T/C	Prev	.97	.657	-.014	.077	.99	.678	-.018	.27	.94	.842	-.034	.13	.98	.480	-.018	.47	.94	.761	.081	.29	.015	.0011	.00	.81	.012	.00035	-.013	1.7e-6	.00	.85	.012	.00035		
rs17133378	12	124190502	G/A	Prev	.96	.674	-.014	.066	.99	.693	-.012	.46	.97	.851	-.030	.19	.99	.487	-.017	.49	.96	.775	.083	.28	.015	.0015	.00	.87	.013	5.8e-5	-.014	2.4e-7	.00	.93	.013	5.8e-5		
rs11057396	12	124190621	G/A	Prev	.99	.656	-.013	.011	.1	.696	.010	.55	.97	.846	.031	.17	.98	.663	.008	.77	.97	.767	.065	.39	.013	.0053	.00	.78	.011	.025	.012	.00038	.00	.87	.011	.025		
rs11057397	12	124191728	C/A	Prev	.99	.652	-.013	.0095	.99	.694	-.012	.47	.98	.853	-.026	.24	.97	.662	.011	.67	.97	.767	.065	.39	.013	.005	.00	.8	.011	.00044	-.012	7e-6	.00	.89	.011	.00044		
rs4765219	12	124441010	C/A	Prev	.99	.659	-.013	.0092	.99	.702	-.011	.5	.98	.891	-.022	.24	.98	.673	.012	.64	.97	.780	.076	.32	.013	.0062	.00	.79	.011	.00044	-.012	7e-6	.00	.88	.011	.00044		
rs7973683	12	124449223	C/A	Prev	.99	.652	-.014	.0041	.99	.680	-.020	.24	.98	.889	-.023	.36	.97	.477	-.017	.51	.97	.780	.074	.33	.013	.0068	.00	.94	.012	.00035	-.013	1.4e-6	.00	.94	.012	.00035		
rs863750	12	124505444	C/A	Prev	.1	.403	.007	.14	.1	.462	-.028	.074	.94	.504	.005	.74	.1	.546	.039	.12	.1	.367	.105	.11	.009	.036	33.73	.2	.014	9.7e-6	.012	1.4e-6	25.85	.24	.014	9.7e-6		
rs11730409	12	124506631	T/C	Prev	.1	.598	-.007	.15	.1	.539	-.029	.065	.94	.496	-.005	.76	.98	.478	-.017	.49	.99	.638	.113	.086	.012	.008	.55	25.47	.25	.008	.72	.002	1.5e-6	23.48	.26	.008	.72	
rs123701184	12	132701184	G/A	Prev	.49	.820	.006	.51	.99	.760	-.029	.11	.43	.802	-.020	.52	.97	.863	-.019	.62	.41	.826	.213	.13	.002	.77	32.69	.2	.025	3.5e-6	.017	7.4e-5	57.89	.037	.025	3.5e-6		
rs7323	13	28009031	G/C	Prev	.1	.730	.024	7.2e-6	.1	.752	.009	.65	.1	.906	.009	.75	.1	.804	.071	.027	.1	.880	.019	.84	.023	2.3e-6	.00	.54	.017	5.2e-5	.020	8.2e-10	.00	.42	.017	5.2e-5		
rs9581854	13	28017782	C/T	Prev	.99	.819	-.018	.0043	.99	.867	.010	.65	.99	.840	-.035	.1	.93	.928	.006	.91	.99	.903	.035	.74	.017	.0031	.00	.67	.029	5.9e-10	.024	2.8e-11	.00	.54	.029	5.9e-10		
rs4771122	13	28020180	G/A	Prev	.96	.238	.013	.018	.1	.210	-.010	.58	.1	.213	.058	.0026	.1	.223	.001	.98	.91	.205	.005	.95	.014	.0052	43.63	.13	.027	2.6e-9	.022	2.8e-10	52.84	.06	.027	2.6e-9		
rs1006353	13	28047269	A/G	Prev	.1	.250	.015	.0079	.1	.332	-.001	.96	.1	.655	.013	.42	.1	.206	.002	.93	.1	.276	.047	.51	.013	.0084	.00	.88	.020	3.9e-9	.018	1.5e-10	52.84	.06	.020	3.9e-9		
rs2504236	13																																					

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta										
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Eff	P								
rs11024704	14	78786077	A/C	Prev	1	.857	.003	.69	1	.857	.012	.59	1	.917	-.021	.47	1	.884	-.055	.16	.001	.84	-.00	.45	.009	.11	.006	.19	.00	.47					
rs17141420	14	78989454	G/T	Prev	1	.471	-.016	.00018	1	.396	-.029	.065	1	.416	-.015	.54	1	.423	.066	.32	-.017	.78e-5	-.00	.69	-.022	1.2e-11	-.020	2.7e-17	.00	.58					
rs23705983	14	79903376	C/T	Prev	.99	.354	-.016	.0018	.99	.354	-.014	.38	.96	.776	-.073	.019	.99	.362	.072	.28	-.028	1.00e5	-.00	.75	-.022	2.4e-11	-.020	2.7e-17	.00	.69					
rs17109221	14	79910119	C/T	Prev	1	.791	-.026	1.3e-5	.99	.787	-.044	.012	.98	.987	-.004	.95	.97	.673	.064	.57	-.028	3.4e-7	-.00	.44	-.025	4.3e-8	-.026	7.8e-14	.00	.66					
rs17109256	14	79939664	G/T	Prev	1	.789	-.027	4.5e-6	.99	.786	-.048	.017	.99	.986	-.002	.97	.983	.056	.57	-.029	9.6e-8	-.00	.63	-.024	1.8e-7	-.026	1.1e-13	.00	.66						
rs17109256	14	79939664	G/T	Prev	1	.789	-.026	7.9e-6	.99	.786	-.048	.019	.99	.987	-.011	.88	.99	.885	.058	.56	-.028	1.3e-7	-.00	.44	-.028	7.2e-14	-.029	1.2e-10	.00	.66					
rs17144011	14	79940383	G/A	Prev	1	.790	-.026	6.2e-6	.99	.796	-.046	.017	.99	.986	-.006	.93	.99	.885	.059	.55	-.028	1.9e-7	-.00	.52	-.028	1.2e-14	-.029	3.6e-20	.00	.69					
rs17156625	14	79942647	A/G	Prev	1	.788	-.026	4.2e-6	.99	.787	-.048	.011	.98	.986	-.017	.8	.97	.600	-.001	.023	1	.881	.058	.55	-.025	1.3e-7	-.027	4e-14	.00	.57					
rs17466997	14	79945162	A/G	Prev	1	.788	-.026	7.3e-6	.99	.787	-.048	.012	.98	.986	-.006	.93	1	.659	-.022	.4	.881	.058	.55	-.027	4.6e-8	-.026	1.3e-11	.00	.57						
rs74926077	14	91547136	C/G	Prev	.98	.688	-.016	.0015	.98	.682	-.001	.97	.96	.498	-.009	.72	.94	.686	-.071	.32	-.014	.0037	-.00	.51	.011	.0071	.012	8.1e-5	.00	.63					
rs21600077	14	92428410	G/A	Prev	1	.572	-.006	.19	1	.686	-.034	.038	1	.726	-.024	.34	1	.594	.060	.36	-.008	.077	.29	.73	-.012	9.7e-5	-.011	3.2e-5	.20	.45					
rs30707661	14	92459958	C/T	Prev	1	.532	-.004	.45	1	.645	-.043	.0079	1	.570	-.016	.62	1	.331	-.016	.55	-.007	.13	.44	.76	.12	-.010	.00062	-.010	.0027	35.29	.15				
rs3783890	14	93790276	T/C	Prev	1	.812	-.017	.0045	1	.788	-.032	.093	1	.890	-.012	.76	1	.768	.003	.97	-.015	.005	-.00	.5	.019	.76e-7	.018	1.3e-8	.00	.59					
rs12147136	14	94072304	A/C	Prev	.99	.297	-.032	1.7e-9	.99	.311	-.014	.42	.99	.591	-.023	.16	.97	.334	.004	.89	-.97	.421	.025	-.7	-.028	1.6e-9	-.018	1.2e-9	52.33	.063					
rs7290502	14	94100502	G/T	Prev	.99	.293	-.025	2.4e-6	.99	.308	-.017	.67	.97	.585	-.018	.28	.97	.137	.005	.89	.99	.333	-.007	.92	-.022	2.3e-6	-.010	6.1e-7	1.58	.41					
rs4384548	14	96345143	A/G	Prev	.84	.019	.015	.42	.77	.013	.082	.3	.56	.004	.008	.96	.72	.033	-.033	.69	.46	.012	.205	.66	-.016	.36	.00	.79	.00	.84					
rs1743963	14	103304425	C/T	Prev	1	.824	-.020	.0014	1	.711	-.033	.05	.98	.624	-.019	.24	1	.434	-.028	.25	1	.910	-.046	.68	-.022	5.6e-5	.00	.96	.00	.98					
rs1709400	14	103342049	T/C	Prev	1	.769	-.020	.00033	1	.640	-.023	.16	1	.610	-.025	.13	1	.225	.032	.28	1	.861	-.061	.51	-.021	1.8e-5	.00	.98	.00	.62					
rs1131877	14	104149475	A/G	Prev	1	.617	.006	.19	1	.726	.036	.034	1	.893	.003	.9	1	.742	.028	.71	.009	.059	.00	.46	-.017	1e-7	.014	3.4e-8	13.42	.33					
rs861539	14	104165753	G/A	Prev	.98	.615	.007	.18	.99	.725	.036	.036	.92	.905	.003	.91	1	.774	.026	.39	.96	.736	.030	.7	.009	.051	.00	.51	.015	8.8e-5					
rs12440086	15	27038492	C/A	Prev	.99	.474	-.012	.009	.99	.388	-.034	.032	1	.431	-.011	.5	.97	.793	.024	.45	.99	.394	.119	.077	-.014	.0017	-.013	9.9e-6	14.03	.32					
rs8042543	15	31708263	C/T	Prev	.96	.788	-.016	.0084	.95	.721	.012	.49	.96	.668	-.035	.041	.97	.895	-.056	.18	-.92	.762	.033	.66	-.016	.003	15.49	.32	-.005	.16					
rs8037818	15	32927476	C/T	Prev	1	.230	.002	.7	1	.204	-.009	.64	1	.329	.005	.74	1	.310	-.033	.63	-.002	.73	.00	.94	-.001	.8	.00	.004	30.62	.21					
rs149113955	15	39654281	G/A	Prev	.54	.997	.030	.63	1	.597	-.088	.68	.36	1.000	1.043	.3	.48	.999	.147	.81	.14	.999	1.859	.54	.021	.1	.00	.69	.00	.6					
rs1711906	15	40325691	C/T	Prev	1	.971	.001	.93	1	.778	-.017	.36	.99	.590	.013	.41	1	.807	.174	.033	.004	.66	.35	.33	.19	-.002	.79	30.73	.00	.2					
rs1559677	15	47738063	A/G	Prev	1	.619	-.016	.0015	1	.585	.003	.84	1	.516	.013	.4	1	.285	.040	.16	1	.542	-.131	.049	-.011	.013	62.03	.032	-.018	1.9e-5	52.55	.061			
rs3736485	15	51748610	A/G	Prev	.98	.474	.006	.19	.97	.494	.035	.026	1	.818	.006	.77	.97	.570	.013	.62	.93	.593	.020	.76	-.002	.59	41.19	.15	.018	7.4e-7	66.12	.011			
rs8030605	15	56504598	G/A	Prev	1	.870	.013	.069	1	.838	.020	.37	1	.568	.032	.043	.99	.904	.005	.9	1	.730	.051	.48	.013	.031	1.42	.4	.015	.0013	.00	.53			
rs12595496	15	56528806	A/G	Prev	.99	.869	.013	.068	.99	.832	-.020	.35	.98	.590	.033	.04	.99	.903	.006	.89	.98	.730	.054	.45	.013	.03	6.27	.37	.012	.01	.012	.00081	.00	.51	
rs2593235	15	57541201	G/A	Prev	.98	.439	.025	.074	.98	.612	.008	.65	.99	.630	.048	.075	.98	.536	.019	.77	.011	.011	.478	.38	.007	.054	.009	.0019	.00	.28	.45				
rs17203831	15	62134392	T/G	Prev	.97	.976	.025	.17	.98	.805	.074	.00295	1	.904	.010	.82	1	.907	.009	.38	.035	.001	.35	.49	.028	.0025	.031	9.4e-6	23.32	.26	.48				
rs172149754	15	62319432	G/C	Prev	.98	.978	.029	.075	.99	.900	.009	.73	.98	.792	.070	.00043	.99	.945	-.014	.81	.97	.012	.067	.56	.036	.00092	.021	.47	.28	.026	.029	.032	8.9e-5	8.64	.36
rs11071896	15	66821250	A/G	Prev	1	.740	.008	.14	1	.810	-.011	.58	1	.806	-.004	.86	1	.907	.077	.081	.009	.083	.00	.47	.013	.001	.00038	.00	.34	.00	.53	.068			
rs14403572	15	67053151	T/C	Prev	.98	.287	.000	.96	.98	.099	.035	.052	.98	.071	-.003	.93	.97	.148	.010	.79	.97	.664	.182	.010	.002	.008	5.7e-5	.00	.33	.00	.53	.068			
rs17160081	15	67492501	G/A	Prev	1	.244	-.004	.35	1	.315	-.027	.096	1	.486	-.010	.94	1	.205	.010	.58	.99	.320	.095	.16	-.004	.36	10.25	.29	-.010	.0042	.39	.28	.31		
rs11637027	15	67497735	G/T	Prev	.98	.414	-.025	3.2e-7	.99	.661	-.045	.0034	.98	.759	-.039	.037	.96	.463	-.062	.019	.97	.354	.116	.008	-.029	1.1e-11	.00	.44	-.024	9.4e-9	.00	.46			
rs80826535	15	68043059	G/T	Prev	.99	.769	.024	.25e-5	1	.583	.048	.0017	.99	.473	.002	.91	.98	.683	.098	.16	1	.648	.118	.077	.025	3.2e-7	.39	.80	.6	.7e-16	.00	.46			
rs80826535	15	68076397	G/T	Prev	1	.764	.023	3.2e-5	1	.574	.045	.0034	1	.418	.018	.27	1	.620	.093	.035	1	.651	.108	.11	.027	6e-6	.31	.001	3.9e-23	4.68	.39	.39			
rs10955770	15	68077168	A/C	Prev	1	.763	.023	2.8e-5	1	.418	.018	.27	1	.421	.053	.04	1	.649	.108	.033	1	.649	.108	.033	.029	1.1e-10	.18	.59	.031	1.9e-17	.029	3.9e-23	1.39	.41	
rs1076970	15	68080860	A/C	Prev	1	.924	.026	8.8e-8	1	.661	.044	.0037	1	.249	.036	.09	.97	.477	.016	.52	1	.303	.138	.023	.029	1.1e-10	.18	.59	.031	1.9e-17	.029	3.9e-23	1.39	.41	
rs1770972	15	68084836	G/A	Prev	1	.764	.024	4.6e-5	1	.419	.017	.25	.98	.309	.037	.16	.99	.661	.110	.036	.026	2.4e-7	11.74	.34	.028	5.6e-11	.028	6.8e-7	.00	.46	.46				
rs2241423	15	68086538	G/C	Prev	1	.765	.023	4.1e-5	1	.575	.045	.0036	1	.418	.017	.25	1	.630	.111	.096	.026	1.7e-7	.00	.42	.001	2.4e-11	.029	7.8e-23	.00	.46	.46				
rs975210	15	70364352	G/A	Prev	.95	.837	.018	.008	.98	.848	-.014	.54	.92	.828	.016	.66	.95	.839	.045	.62	.014	.019	.00	.68	.005	.3	.00	.018	.00	.58	.38				
rs2277598	15	70327478	T/C	Prev	1	.357	-.011	.027	1	.444	-.043	.0058	1	.721	-.022	.21	1	.638	.002	.95	1	.411	.100	.12	-.014	.0014	34.82	.19	-.016	5.7e-5	.00	.59			
rs8027181	15	73088669	A/T	Prev	.99	.322	-.010	.04	.99	.410	-.042	.0079	.99	.716	-.026	.14	.99	.389	.006	.82	.99	.408	-.085	.19	-.014	.0022	31.66	.21	-.020	1					

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta								
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Het	P						
rs1135999	16	15131962	A/G	1	.696	.012	.018	1	.575	-.015	.34	1	.570	.006	.7	1	.770	.045	.14	.609	.032	.63	.010	.028	6.06	.37	.013	.0013	.012	.00011	.00	.48	
rs1136001	16	15131974	G/T	1	.696	.012	.018	1	.575	-.015	.34	1	.570	.006	.7	1	.770	.045	.14	.609	.032	.63	.010	.028	6.06	.37	.013	.0013	.012	.00011	.00	.49	
rs7191155	16	19800213	T/C	1	.828	.020	.0018	1	.856	.011	.48	1	.780	.014	.48	1	.893	-.037	.36	1	.762	.058	.45	.018	.0016	.00	.69	.023	1.6e-8	.00	.57		
rs7190603	16	19928662	T/C	1	.860	.026	.00014	.99	.906	-.026	.32	.98	.991	.117	.17	.97	.937	-.049	.35	1	.958	.016	.92	.022	.00076	40.63	.15	.038	3e-13	.032	4.8e-15	50.33	.073
rs12444979	16	19933600	C/T	1	.859	.026	.00014	.99	.906	-.026	.32	.98	.991	.117	.17	.97	.937	-.049	.35	1	.958	.016	.92	.022	.00076	25.77	.25	.040	1.3e-17	.034	2.7e-19	51.10	.069
rs12446534	16	19935073	G/T	1	.859	.025	.0002	1	.903	-.025	.34	.97	.991	.117	.17	.97	.937	-.049	.35	1	.958	.016	.92	.022	.00076	24.51	.26	.039	1.1e-17	.034	4.3e-19	49.76	.077
rs11635988	16	19944363	A/G	1	.857	.025	.00021	.98	.894	-.021	.4	.91	.990	.113	.18	.97	.773	-.057	.056	.99	.033	.89	.019	.003	64.00	.025	.040	6.4e-18	.034	8.9e-20	52.42	.062	
rs80534079	16	19975407	C/T	1	.858	.026	.00016	.99	.894	-.021	.4	.91	.990	.113	.18	.97	.773	-.057	.056	.99	.033	.89	.019	.003	64.00	.025	.040	6.4e-18	.033	2.2e-18	42.17	.003	
rs4235585	16	20255097	C/T	1	.999	.013	.0021	.99	.873	-.016	.31	.99	.208	-.037	.056	.99	.461	-.037	.17	.99	.130	.112	.023	.00012	9.9e-5	.00	.78	.025	1.9e-8	.024	2.2e-11	.00	.84
rs11074446	16	20255123	T/C	1	.999	.013	.0021	.99	.873	-.016	.31	.99	.208	-.037	.056	.99	.461	-.037	.17	.99	.130	.112	.023	.00012	9.9e-5	.00	.78	.025	1.9e-8	.024	2.2e-11	.00	.84
rs12597579	16	20257667	C/T	1	.947	.025	.02	.98	.941	.033	.32	.99	.798	.036	.07	.98	.907	.053	.22	1	.912	.169	.13	.029	.00077	.00	.71	.023	.0072	.026	1.9e-5	.00	.79
rs12597682	16	20258432	C/T	1	.947	.025	.019	.98	.942	.037	.26	.99	.798	.036	.069	.97	.921	.046	.34	1	.912	.170	.13	.030	.00077	.00	.73	.023	.0084	.026	2.3e-5	.00	.81
rs9652588	16	20370810	C/T	1	.496	.020	4e-5	1	.607	.010	.52	1	.864	.033	.15	1	.552	.007	.8	1	.369	-.072	.46	.019	1.3e-5	.00	.58	.018	4.3e-5	.018	4.4e-9	.00	.72
rs9652589	16	20370816	C/T	1	.494	.020	4e-5	1	.606	.010	.52	1	.864	.033	.15	1	.571	.013	.63	1	.363	-.048	.47	.019	1.3e-5	.00	.76	.016	2.3e-5	.017	1.4e-9	.00	.83
rs7195386	16	24578458	T/C	1	.487	.016	.00059	.99	.444	-.011	.48	.99	.583	-.011	.5	.99	.221	.009	.9	.012	.00012	.21	.27	.012	.00012	41.27	.28	.013	.00049	.013	6.3e-6	1.70	.41
rs20504392	16	28333411	G/A	1	.733	.021	.001	.97	.823	-.048	.02	.91	.931	-.012	.72	.94	.904	.005	.92	1	.869	-.083	.47	.023	.00012	.00	.72	.021	1.9e-9	.021	1.8e-12	.00	.83
rs1812066	16	28513403	A/G	1	.967	.015	.0051	.98	.688	-.051	.0023	.94	.918	-.073	.015	.97	.914	-.050	.28	.94	.819	-.044	.61	.020	5.2e-5	51.01	.086	.025	1.6e-6	.020	5.2e-5	51.01	.086
rs62034325	16	28538640	A/G	1	.967	.015	.0051	.98	.688	-.051	.0023	.94	.918	-.073	.015	.97	.914	-.050	.28	.94	.819	-.044	.61	.020	5.2e-5	51.01	.086	.025	1.6e-6	.020	5.2e-5	51.01	.086
rs12008514	16	28823605	G/A	1	.967	.015	.0051	.98	.688	-.051	.0023	.94	.918	-.073	.015	.97	.914	-.050	.28	.94	.819	-.044	.61	.020	5.2e-5	51.01	.086	.025	1.6e-6	.020	5.2e-5	51.01	.086
rs1987471	16	28823666	T/G	1	.967	.015	.0051	.98	.688	-.051	.0023	.94	.918	-.073	.015	.97	.914	-.050	.28	.94	.819	-.044	.61	.020	5.2e-5	51.01	.086	.025	1.6e-6	.020	5.2e-5	51.01	.086
rs8049439	16	28837515	T/C	1	.572	.045	.004	.85	.727	-.037	.053	1	.565	-.019	.44	.87	.711	-.087	.25	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs80624005	16	28837906	A/G	1	.590	.052	.00091	.98	.866	-.030	.0011	.99	.713	-.034	.23	.97	.768	-.065	.39	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs62036624	16	28839930	G/T	1	.620	.020	4.2e-5	1	.590	-.052	.00086	1	.869	-.083	.0006	1	.896	-.072	.086	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs4788102	16	28848668	G/A	1	.601	.050	.0015	1	.601	-.050	.0015	1	.869	-.083	.0006	1	.896	-.072	.086	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs7498665	16	28883241	A/G	1	.601	.050	.0015	1	.601	-.050	.0015	1	.869	-.083	.0006	1	.896	-.072	.086	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs7353597	16	28883241	C/T	1	.601	.050	.0015	1	.601	-.050	.0015	1	.869	-.083	.0006	1	.896	-.072	.086	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs7353597	16	28883241	C/T	1	.601	.050	.0015	1	.601	-.050	.0015	1	.869	-.083	.0006	1	.896	-.072	.086	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs4885190	16	28889486	A/G	1	.591	.052	.00087	.94	.862	-.082	.00042	1	.723	-.043	.13	.91	.756	-.069	.43	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs78184597	16	28921809	T/C	1	.726	.041	.15	.91	.756	-.069	.43	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	.75	.023	6.1e-5	.00	.81	.031	3.1e-23	.029	8.6e-29	63.25	.018
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027	.75	.99	.771	-.070	.36	.026	2.9e-7	.00	.45	.030	1.6e-21	.027	4.7e-27	2.66	.4
rs29048580	16	28944396	C/G	1	.367	.045	.005	.94	.114	.064	.01	.99	.088	.094	.038	.85	.212	.027															

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta									
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Het	P							
rs6499129	16	67458251	A/C	Prev	.99	.905	-.023	.0048	1	.892	-.007	.77	.97	.978	.007	.22	1	.461	-.002	.93	.99	.824	-.080	.36	-.013	.063	-.016	.0018	.00	.53				
rs2307022	16	68381978	A/G	Prev	.99	.342	-.000	1	.99	.300	-.014	.41	.97	.181	-.016	.43	.99	.249	-.021	.49	.99	.358	-.098	.16	-.002	.7	.00	.46	.016	9.9e-7				
rs8890715	16	69556715	C/T	Prev	.98	.574	-.021	1.9e-5	.98	.484	-.032	.15	.91	.704	-.061	.035	.96	.729	-.055	.47	.98	.73e-5	58.69	.046	-.017	1.7e-10	.00	.49	.016	1.7e-10				
rs617447555	16	71885423	A/G	Prev	.98	.804	-.018	.003	.9	.826	-.022	.3	.96	.787	-.021	.27	.85	.937	-.098	.081	.99	.781	.023	.77	.019	.00048	.00	.73	.013	.0039				
rs62051555	16	72830539	C/G	Prev	.99	.962	.006	.63	.97	.977	.065	.21	.76	.996	-.057	.68	.92	.987	.015	.9	.99	.995	.702	.15	.010	.42	.00	.71	.038	5.7e-5				
rs756717	16	72996162	G/A	Prev	.98	.611	-.018	.00021	.98	.624	-.029	.076	.97	.96	.773	-.052	.086	.96	.745	.127	.1	.018	8.1e-5	48.54	.1	.013	5e-5	.015	2.4e-8	40.56	.13			
rs4788694	16	73070083	C/G	Prev	.96	.555	.007	.18	.95	.396	.013	.41	.92	.217	-.037	.059	.86	.442	-.005	.94	.908	.086	.00	.42	.008	.059	.008	.011	.00	.56				
rs889512	16	75242012	C/G	Prev	.95	.891	-.002	.79	.94	.908	-.064	.02	.77	.960	-.014	.76	.85	.912	-.024	.62	.94	.887	.207	.087	-.006	.39	53.90	.07	.408	.059				
rs1424233	16	79882751	T/C	Prev	1	.488	-.002	.71	1	.604	-.009	.57	1	.657	-.005	.74	1	.674	-.015	.82	.703	.49	.00	.5	.006	.089	.005	.082	.00	.59				
rs12443634	16	81524274	A/C	Prev	.85	.277	-.007	.23	.94	.202	-.020	.31	1	.177	.020	.33	.92	.296	-.017	.56	.81	.237	-.048	.77	.005	.35	.00	.52	.002	.72	.003			
rs2925979	16	81534790	T/C	Prev	.84	.294	.005	.36	1	.224	-.027	.14	.95	.412	-.012	.48	1	.309	-.011	.68	.8	.304	-.022	.78	.001	.91	.00	.44	-.001	.74	.00	.58		
rs455677	16	89644001	T/C	Prev	.58	.938	-.019	.14	.87	.851	-.040	.079	.5	.769	-.022	.41	.68	.930	-.012	.66	.97	.498	-.048	.47	.001	.8	.00	.91	.000	.92	.001	.96		
rs741677	16	463843	A/G	Prev	.98	.566	.001	.77	.98	.511	.008	.61	.98	.699	-.003	.87	.98	.310	-.012	.66	.97	.498	-.048	.47	.001	.8	.00	.91	.000	.92	.001	.96		
rs9914578	17	2005136	C/G	Prev	.99	.803	-.000	.95	.95	.766	-.002	.91	.95	.781	-.002	.9	.98	.505	-.018	.47	.99	.659	.032	.65	-.001	.87	.00	.95	-.002	9e-8	.00	.89		
rs903160	17	2091765	C/T	Prev	1	.693	-.001	.9	1	.682	-.005	.78	1	.662	-.015	.37	1	.526	-.008	.75	1	.574	.134	.046	-.002	.71	17.65	.3	-.007	.085	-.014	1e-5		
rs2281727	17	2117945	A/G	Prev	1	.650	-.002	.73	.99	.656	-.002	.75	.99	.740	-.004	.81	.98	.582	-.029	.26	.99	.611	.106	.12	-.002	.58	.00	.45	-.011	2.7e-5	41.38	.13		
rs1885987	17	2203025	T/G	Prev	1	.618	-.001	.86	1	.595	.012	.46	1	.882	.042	.27	1	.752	.042	.57	.000	.92	.00	.67	.004	.26	.003	.35	.00	.73	.00	.73		
rs35400274	17	4803711	G/A	Prev	.89	.855	-.017	.018	.99	.816	-.002	.91	.79	.906	-.039	.2	.99	.658	.013	.62	.77	.882	-.208	.062	-.015	.016	23.39	.27	-.010	.048	-.012	.0024	11.49	.34
rs6065	17	4836381	C/T	Prev	1	.917	-.018	.035	1	.873	-.030	.2	1	.936	-.052	.11	1	.785	-.002	.94	1	.928	-.066	.59	-.021	.007	.00	.8	-.018	.011	-.019	.00021	.00	.89
rs3026101	17	5280440	T/C	Prev	1	.697	-.021	3.8e-5	1	.646	-.023	.15	1	.383	-.039	.018	1	.757	.012	.7	1	.569	-.043	.49	-.022	1.8e-6	.00	.65	-.018	3.5e-8	-.020	2.7e-13	.00	.71
rs1000940	17	5283252	A/G	Prev	.99	.693	-.020	.00012	.99	.646	-.022	.18	.99	.383	-.035	.032	.98	.763	.005	.86	1	.569	-.044	.49	-.021	7.8e-6	.00	.79	-.019	1.3e-8	-.020	6.2e-13	.00	.88
rs1071648	17	5326089	C/T	Prev	.99	.727	-.020	.00019	.99	.631	-.024	.14	.98	.230	-.050	.0083	.99	.764	-.028	.35	.98	.475	.090	.16	-.023	2.2e-6	.00	.48	-.014	.00073	-.017	1.9e-8	12.02	.34
rs12761	17	5326145	G/A	Prev	1	.729	-.020	.00002	1	.634	-.023	.16	.98	.225	-.051	.0071	1	.766	-.027	.36	1	.480	-.084	.19	-.023	2.5e-6	.00	.48	-.014	.00013	-.018	3.3e-8	7.12	.37
rs4646404	17	17420199	G/A	Prev	.72	.648	-.003	.56	.94	.741	-.014	.44	.75	.862	-.047	.073	.9	.863	.077	.06	.62	.836	-.025	.81	-.005	.37	42.34	.14	-.004	.14	28.04	.22	.004	
rs4925114	17	17711270	A/G	Prev	.86	.382	.007	.21	.99	.516	-.000	.98	.81	.877	-.026	.33	.98	.560	-.006	.81	.8	.693	-.148	.057	-.004	.42	28.01	.23	-.014	.00051	-.007	.031	63.29	.018
rs203462	17	19812541	T/C	Prev	1	.622	.008	.11	1	.598	-.019	.22	1	.799	.015	.44	1	.432	-.020	.44	1	.698	-.116	.1	.005	.3	41.10	.15	.012	.00021	.009	.0025	39.29	.14
rs2108787	17	19861458	C/T	Prev	1	.623	.008	.13	1	.600	-.021	.2	1	.800	.014	.49	1	.445	-.026	.31	1	.700	-.118	.097	.004	.36	46.24	.11	.011	.00051	.009	.0065	44.50	.11
rs406044	17	21261560	C/T	Prev	.54	.512	.015	.023	1	.547	-.000	.98	.5	.444	.009	.68	1	.350	-.023	.39	.49	.455	-.071	.46	.010	.064	.00	.52	.016	1.4e-7	-.015	3.2e-8	.00	.54
rs4640244	17	21284223	A/G	Prev	.5	.643	-.007	.3	1	.684	-.007	.66	.45	.637	-.028	.25	.8	.813	.009	.8	.45	.685	-.058	.58	-.008	.18	.00	.89	-.016	4.6e-6	-.014	3e-8	.00	.82
rs180950758	17	29036425	A/T	Prev	.88	.886	-.012	.13	.88	.855	-.008	.74	.87	.800	.014	.57	.83	.826	.012	.75	.84	.763	.066	.42	-.008	.25	.00	.7	-.010	.085	-.009	.039	.00	.82
rs17826212	17	29161845	G/A	Prev	1	.893	-.012	.12	1	.861	-.016	.46	1	.865	.009	.69	1	.925	.007	.88	1	.748	.042	.57	-.010	.16	.00	.83	-.016	.021	-.013	.0086	.00	.86
rs3766419	17	29164023	C/A	Prev	1	.613	-.004	.38	1	.617	-.013	.42	1	.766	.018	.34	1	.290	-.024	.38	1	.579	.028	.66	-.004	.36	.00	.66	.004	.11	.00	.79	.00	.79
rs3760419	17	29247715	G/A	Prev	1	.624	-.005	.35	1	.642	-.011	.51	1	.770	.020	.3	1	.566	-.015	.55	1	.619	-.003	.96	-.004	.37	.00	.74	-.004	.12	.00	.86	.00	.86
rs2306590	17	34854280	G/A	Prev	1	.593	.018	.00023	1	.664	.052	.0017	.98	.679	.020	.25	1	.885	-.003	.95	1	.662	.009	.99	.020	9.1e-6	5.52	.38	.018	3.2e-6	.019	9.8e-11	.00	.49
rs2857310	17	34914365	G/A	KP	.98	.561	.023	3.3e-6	.98	.628	.056	.00062	.99	.639	.027	.11	.97	.688	.017	.53	.97	.636	.007	.91	.025	1.3e-8	.00	.41	.016	1.1e-5	.019	2.6e-12	24.24	.25
rs12510665	17	34914787	T/C	Prev	1	.593	.019	.00012	.99	.664	.052	.0016	1	.681	.020	.23	1	.862	.023	.52	1	.644	.006	.93	.021	1.8e-6	.00	.43	.016	2.4e-7	.018	2.7e-12	.00	.45
rs11658063	17	36103872	C/G	Prev	.97	.401	-.001	.83	1	.351	-.013	.44	.84	.275	-.004	.81	1	.393	.022	.38	1	.377	-.234	.28	.012	.3	.00	.75	-.022	.019	-.018	.012	.00	.83
rs2123685	17	38053889	C/T	Prev	1	.962	.014	.26	1	.970	-.000	.99	.96	.986	-.040	.77	.99	.982	.009	.49	1	.977	-.234	.28	.012	.3	.00	.75	-.022	.019	-.018	.012	.00	.83
rs22305016	17	38240216	C/T	KP	1	.922	.001	3e-11	1	.971	-.029	.14	1	.969	.010	.87	.99	.992	-.456	.24	.99	.992	-.456	.24	.035	5.9e-10	62.91	.044	.006	.6	-.036	2.5e-7	79.87	.00053
rs11052097	17	45310717	C/T	Prev	.98	.612	-.014	.0049	.98	.647	-.022	.17	1	.611	.025	.13	.96	.649	-.029	.28	.97	.592	-.074	.26	-.012	.0058	42.31	.14	-.013	6.4e-5	-.013	1.5e-6	28.03	.22
chr17:40126492D	17	45794706	A/G	Prev	.86	.327	-.017	.0014	.87	.408	-.016	.39	.84	.207	.045	.18	.79	.351	.052	.49	.020	6.6e-5	.00	.75	.013	1.5e-5	.00	.75	.013	1.5e-5	-.016	5.8e-9	.00	.76
rs6040108	17	46264923	AG/A	KP	1	.898	-.038	1.4e-6	.99	.918	-.014	.62	.98	.813	-.064	.018	1	.862	-.185	.053	-.042	3.6e-9	51.43	.083	-.024	9e-5	.00	.73	-.016	3.6e-9	51.43	.083	.00	.76
rs9299	17	46292923	C/T	Prev	1	.287	-.013	.014	.99	.255	.008	.65	1	.248	-.046	.013	.98	.303	-.004	.02	1	.209	.054	.51	.013	.0084	64.64	.023	.017	3.6e-7	.017	1.2e-8	58.22	.035
rs4																																		

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta											
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Eff	P									
rs7239883	18	40147671	G/A	Prev	.98	.386	.014	.0064	.97	.320	.045	.0071	.99	.317	.007	.68	.97	.414	.019	.47	.96	.237	.028	.71	.014	.0014	24.26	.26	.016	1.6e-7	.016	6.8e-10	7.62	.37		
rs1518170	18	40708905	T/C	Prev	.99	.372	.017	.00053	.99	.508	.006	.71	.99	.466	.025	.12	.98	.433	.020	.43	.97	.610	.006	.93	.015	.00043	.00	.39	.011	.0057	.012	1.2e-5	.00	.39		
rs1518142	18	40721490	T/C	Prev	1	.377	.017	.00044	1	.509	.006	.63	1	.461	.025	.11	.99	.398	.010	.43	1	.618	.002	.98	.016	.00025	.00	.73	.011	.0021	.012	2.4e-6	.00	.75		
rs7231852	18	40761976	G/A	Prev	1	.747	.014	.012	1	.748	.021	.26	.99	.643	.019	.69	.99	.834	.039	.26	1	.813	.003	.98	.014	.0066	.00	.79	.015	.00032	.015	6.8e-6	.00	.79		
rs4129322	18	50605642	G/A	Prev	1	.915	.003	.74	.99	.912	.049	.071	.99	.643	.019	.66	.98	.743	.027	.35	1	.843	.002	.3	.005	.44	24.80	.26	.011	.12	.008	.1	10.60	.35		
rs7243785	18	52475162	A/G	Prev	1	.771	.015	.0097	1	.726	.027	.12	.99	.622	.020	.21	1	.816	.012	.71	1	.769	.008	.91	.016	.002	.00	.88	.018	.7e-5	.017	5e-7	.00	.93		
rs8092503	18	52479487	A/G	Prev	1	.771	.015	.01	1	.726	.026	.13	1	.619	.019	.23	1	.816	.013	.7	1	.769	.008	.92	.015	.0023	.00	.87	.014	5.8e-5	.015	4.9e-7	.00	.94		
rs7243357	18	56883319	T/C	Prev	.98	.823	.003	.66	.99	.875	.022	.23	.94	.835	.000	.98	.98	.773	.048	.58	.97	.773	.048	.58	.002	.39e-8	.015	8.7e-6	.015	8.7e-6	.015	5.8e-5	.015	.036		
rs7234864	18	5734857	T/C	Prev	.99	.734	.037	6.8e-12	.98	.809	.032	.1	.97	.834	.069	.0014	.98	.540	.009	.71	.98	.618	.042	.55	.037	8.1e-14	14.74	.32	.046	8.9e-40	.043	1.1e-50	23.88	.24		
rs17700144	18	57811982	G/A	Prev	1	.785	.040	7.2e-12	.97	.876	.051	.029	1	.961	.066	.1	.93	.951	.007	.9	1	.663	.077	.27	.045	6.2e-48	.050	6.7e-58	.046	6.7e-58	.046	6.7e-58	.046	.73		
rs6567160	18	57829135	T/C	Prev	1	.766	.044	5e-15	.99	.847	.062	.004	1	.828	.061	.0041	.98	.633	.041	.55	.99	.633	.041	.55	.045	2.2e-48	.050	6.7e-58	.046	6.7e-58	.046	6.7e-58	.046	.35		
rs6663121	18	57838401	G/A	Prev	1	.765	.044	6.6e-15	1	.840	.052	.013	1	.831	.064	.0025	1	.634	.043	.55	1	.634	.043	.55	.044	7.1e-18	.00	.56	.056	8.8e-53	.052	1.9e-69	.050	.28		
rs571312	18	57839769	C/A	Prev	1	.765	.044	6.2e-15	1	.840	.056	.0081	1	.832	.065	.0022	1	.634	.042	.67	1	.634	.042	.67	.045	8.8e-53	.052	1.9e-69	.050	7.0e-70	.049	8.4e-39	.050	.36		
rs591166	18	57841589	T/C	Prev	.99	.563	.016	.00008	.99	.634	.002	.91	.99	.790	.046	.019	.99	.281	.019	.5	.97	.452	.044	.5	.016	.00021	.00	.41	.027	1.2e-18	.024	1.3e-20	37.48	.16		
rs12967135	18	57849023	G/A	Prev	1	.766	.045	7.2e-16	1	.847	.059	.0057	1	.829	.069	.00098	.97	.722	.026	.37	1	.635	.034	.63	.046	2e-19	.00	.49	.057	2.2e-47	.053	9.8e-65	14.45	.32		
rs538656	18	57850422	G/T	Prev	1	.764	.045	1.4e-15	1	.835	.055	.009	1	.826	.065	.00018	.99	.631	.039	.14	1	.634	.029	.68	.046	3.1e-19	.00	.68	.059	7.8e-45	.053	6.7e-62	22.16	.27		
rs17783313	18	57851097	T/C	Prev	1	.766	.045	6.5e-16	1	.847	.059	.0055	1	.829	.069	.00097	.98	.633	.039	.14	1	.634	.029	.68	.046	3.1e-19	.00	.68	.059	7.8e-45	.053	6.7e-62	22.16	.27		
rs10871777	18	57851763	A/G	Prev	1	.762	.044	2.5e-15	1	.834	.062	.0027	1	.815	.069	.0007	1	.596	.034	.2	1	.596	.007	.91	.046	4.6e-19	.00	.64	.055	6.7e-52	.052	8e-70	.050	.43		
rs476828	18	57852587	T/C	Prev	1	.761	.044	2.4e-15	1	.845	.060	.0047	1	.829	.069	.00086	.99	.743	.040	.17	1	.633	.034	.62	.046	2.6e-19	.00	.52	.054	4.9e-51	.052	5.6e-69	.052	.41		
rs11152213	18	57852948	A/C	Prev	1	.763	.044	2.4e-15	1	.845	.060	.0047	1	.829	.069	.00086	.99	.743	.040	.17	1	.633	.034	.62	.046	2.6e-19	.00	.52	.054	4.9e-51	.052	5.6e-69	.052	.41		
rs8089364	18	57858829	T/C	Prev	1	.734	.044	3.2e-16	1	.817	.052	.0091	1	.825	.066	.0017	1	.857	.067	.058	1	.636	.066	.34	.046	4e-20	12.25	.34	.051	3.1e-49	.049	3.5e-66	.050	.43		
rs12969709	18	57859663	C/A	Prev	1	.736	.044	3.3e-16	1	.818	.049	.013	1	.826	.066	.0017	1	.860	.085	.02	1	.639	.058	.4	.046	1.6e-20	13.42	.33	.052	3.4e-44	.050	1.3e-63	10.34	.35		
rs921971	18	57861663	T/C	Prev	1	.735	.044	3.3e-16	1	.818	.049	.013	1	.826	.066	.0017	1	.860	.085	.02	1	.639	.058	.4	.046	1.6e-20	13.42	.33	.052	3.4e-44	.050	1.3e-63	10.34	.35		
rs11663816	18	57861663	C/A	Prev	1	.735	.044	3.3e-16	1	.818	.049	.013	1	.826	.066	.0017	1	.860	.085	.02	1	.639	.058	.4	.046	1.6e-20	13.42	.33	.052	3.4e-44	.050	1.3e-63	10.34	.35		
rs12970134	18	57884750	T/C	Prev	1	.736	.044	3e-16	1	.821	.046	.021	1	.831	.072	.0007	1	.889	.087	.031	1	.640	.063	.36	.046	5.1e-19	21.01	.28	.050	4.7e-47	.048	1.7e-64	11.17	.34		
rs9944545	18	57884750	G/A	Prev	1	.736	.044	3e-16	1	.821	.046	.021	1	.831	.072	.0007	1	.889	.087	.031	1	.640	.063	.36	.046	5.1e-19	21.01	.28	.050	4.7e-47	.048	1.7e-64	11.17	.34		
rs17068442	18	57958244	C/T	Prev	.99	.708	.028	7.9e-8	.97	.780	.025	.19	.98	.878	.060	.014	.96	.482	.016	.53	.98	.651	.104	.12	.028	7e-9	31.39	.21	.034	2.2e-23	.032	8.5e-31	26.81	.23		
rs17068442	18	58040624	G/A	Prev	1	.961	.064	1.5e-7	1	.965	.050	.23	1	.988	.001	.98	.99	.974	.390	.062	.059	6.5e-8	62.66	.03	.063	6.4e-14	.061	1.8e-20	53.52	.056	1.8e-20	53.52	.056	1.8e-20	53.52	.056
rs12454712	18	60845884	T/C	Prev	.64	.629	.016	.012	1	.638	.025	.13	1	.523	.018	.27	1	.757	.070	.017	.57	.540	.024	.79	.014	.0086	54.32	.067	.017	1.5e-5	.016	4.4e-7	44.16	.11		
rs17710386	18	63461201	T/C	Prev	.86	.664	.011	.04	.86	.668	.008	.65	.82	.651	.002	.93	1	.286	.041	.18	.77	.563	.059	.42	.008	.009	1.99	.4	.012	.00023	.011	7.4e-5	.00	.47		
rs2396359	19	1819125	T/C	Prev	.32	.742	.002	.86	.99	.690	.012	.49	.31	.607	.015	.6	.97	.516	.061	.018	.3	.692	.164	.52	.006	.41	45.60	.12	.015	.00021	.013	.00025	40.35	.14		
rs11672550	19	1937193	C/T	Prev	.44	.477	.009	.21	.92	.540	.017	.27	.38	.645	.023	.4	.91	.808	.011	.77	.42	.537	.025	.8	.006	.37	.00	.58	.021	3e-7	.013	.00014	40.35	.14		
rs45465594	19	3813906	C/A	Prev	.41	.866	.001	.91	1	.749	.015	.91	.53	.808	.040	.15	1	.879	.051	.17	.38	.851	.140	.35	.003	.75	22.33	.27	.009	.97	.001	.86	4.14	.39		
rs45465594	19	3813906	C/A	Prev	.43	.986	.000	.1	.86	.995	.093	.18	.45	.998	.274	.32	.59	.993	.039	.84	.37	.988	.140	.35	.003	.75	22.33	.27	.009	.97	.001	.86	4.14	.39		
rs4542783	19	86242160	T/C	Prev	.84	.535	.008	.12	.99	.440	.019	.22	.86	.279	.011	.55	.92	.462	.058	.37	.988	.140	.35	.003	.75	.004	.42	53.01	.075	.003	.35	.003	.22	41.27	.13	
rs18108738	19	18253539	G/A	Prev	.81	.476	.016	.0035	1	.477	.012	.44	.96	.623	.057	.029	.92	.345	.141	.076	.010	.028	71.01	.008	.009	.0026	63.92	.017	.010	.0026	.009	.0059	66.96	.009		
rs2072490	19	18257540	G/A	Prev	.81	.476	.016	.0035	1	.477	.012	.44	.96	.623	.057	.029	.92	.345	.141	.076	.010	.028	71.01	.008	.009	.0026	63.92	.017	.010	.0026	.009	.0059	66.96	.009		
rs11554159	19	18288954	C/A	Prev	.78	.760	.012	.055	1	.779	.009	.63	.79	.913	.009	.78	1	.764	.021	.48	.69	.835	.026	.8	.010	.084	.00	.81	.008	.061	.009	.011	.00	.88		
rs874628	19	18304700	A/G	Prev	.79	.753	.012	.048	1	.768	.002	.77	.76	.907	.001	.97	1	.793	.034	.28	.7	.824	.025	.8	.010	.085	.00	.69	.007	.096	.008	.018	.00	.79		
rs12608504	19	18389135	A/G	Prev	.58	.343	.013	.051	.99	.332	.008	.61	.69	.199	.031	.19	.99	.368	.038	.15	.47	.331	.115	.24	.015	.0098	.00	.65	.002	.66	.005	.097	24.44	.25		
rs17724992	19	18454825	C/A	Prev	.51	.707	.003	.69	.98	.661	.020	.23	.84	.554	.020	.26	.96	.866	.001	.99	.5	.676	.120	.23	.008	.66	2.28	.39	.017	3						

SNP	Chr	Pos	Allele	non-Hispanic white			Latino			East Asian			African American			South Asian			GERA			GIANT EUR			GERA+GIANT Meta									
				Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Info	Freq	Eff	P	Eff	P	Eff	P	Eff	P	Het	P							
rs16978956	20	18288165	A/G	Prev	.98	.775	-0.017	.0035	.98	.749	-0.017	.35	.97	.849	.006	.8	.96	.443	.010	.71	-.015	.045	.00	.71	-.010	.017	-.012	.00026	.00	.76				
rs72749653	20	182909730	A/G	Prev	1	.807	-0.010	.0095	.98	.787	-0.023	.23	.97	.854	.008	.74	.97	.821	.026	.33	-.009	.128	.00	.53	-.013	.0077	-.011	.0021	.00	.68				
rs404099160	20	182909730	C/T	Prev	1	.922	-0.027	.0031	1	.881	.023	.35	1	.881	.041	.25	1	.801	.041	.25	-.017	.028	.5877	.046	-.016	.02	-.016	.0014	.48	.58				
rs22282873	20	182909730	G/A	Prev	1	.922	-0.025	.0044	1	.883	.022	.37	1	.883	.039	.27	1	.801	.039	.27	-.016	.038	.5829	.048	-.023	.0048	-.019	.00058	48.59	.076				
rs2069126	20	19740957	A/G	Prev	.98	.352	.004	.4	.98	.362	.024	.14	.98	.309	.022	.2	.97	.385	.024	.35	.006	.18	.00	.44	-.003	.98	.003	.39	.00	.45				
rs20705559	20	25187213	G/A	Prev	1	.677	-0.006	.26	1	.748	.002	.91	.98	.432	-0.027	.096	1	.839	-0.001	.1	-.007	.12	.00	.55	-.010	.015	-.009	.00045	.00	.67				
rs6050546	20	25195509	A/G	Prev	.88	.034	-0.059	2.5e-5	.99	.009	-0.02	.2	.73	.001	-0.189	.46	.85	.011	-0.181	.17	-.72	.013	-0.483	.14	-.027	.0036	-.036	2.7e-6	.51	.12				
rs6085552	20	33226491	A/G	Prev	1	.623	-0.004	.44	1	.457	-0.008	.62	.99	.594	.028	.077	1	.628	.007	.78	-.001	.77	.80	.4	-.001	.72	.000	.9	.00	.52				
rs6085735	20	33745676	C/T	Prev	1	.773	-0.009	.11	1	.809	-0.027	.16	.99	.696	.044	.11	.99	.783	.086	.26	-.009	.093	.2939	.23	-.005	.15	-.006	.032	.16	.31				
rs1406948	20	33905169	G/A	Prev	1	.616	.000	.99	1	.666	.014	.38	1	.702	.040	.021	1	.460	.003	.91	1	.464	.049	.16	-.002	.51	-.001	.7	.29	.11				
rs49111492	20	33957199	G/A	Prev	1	.386	.001	.78	1	.340	.013	.42	1	.304	.041	.017	1	.612	.015	.57	1	.534	.049	.12	-.002	.55	.001	.69	.34	.18				
rs4911180	20	33972948	G/A	Prev	1	.383	.002	.66	1	.341	.010	.54	1	.303	.042	.013	1	.613	.008	.75	1	.536	.054	.39	-.000	.94	.001	.64	.34	.18				
rs2242433	20	34023962	G/A	Prev	.99	.629	-0.001	.82	.99	.653	-0.011	.49	.99	.704	.047	.0071	.99	.714	.012	.71	.96	.492	-0.018	.78	-.002	.74	-.000	.94	.34	.18				
rs143384	20	34025756	A/G	Prev	1	.577	-0.001	.84	1	.618	-0.018	.26	1	.694	.044	.01	1	.158	.035	.31	1	.440	.063	.32	-.001	.82	-.000	.97	.49	.62	.077			
rs6013029	20	36399580	G/T	Prev	1	.949	-0.026	.014	1	.941	-0.018	.58	.97	.981	.058	.33	.99	.786	-0.004	.89	1	.972	.199	.3	-.018	.866	-.019	.47	.39	.46	.14			
rs6012059	20	45503214	A/G	Prev	.99	.391	-0.013	.01	.98	.376	-0.043	.0084	.98	.351	-0.031	.065	.98	.226	-0.059	.044	-.98	-.497	-.078	.24	-.011	.004	-.014	1.9e-6	.36	.52	.16			
rs1984707	20	45513435	A/G	Prev	.99	.439	-0.012	.012	.99	.430	-0.031	.052	.99	.361	-0.021	.19	.99	.422	-0.051	.56	-.99	.510	.00	.81	-.012	.0016	-.013	5.6e-6	.00	.88	.25			
rs6018158	20	45538434	T/C	Prev	.98	.403	-0.014	.0056	.98	.510	-0.030	.057	.96	.433	-0.008	.62	.96	.346	-0.038	.16	-.9	.488	-.071	.3	-.015	.0038	-.013	8.2e-6	.00	.68	.88			
rs6090583	20	45558831	A/G	Prev	.94	.479	-0.015	.0027	.91	.576	-0.000	.98	.87	.811	.021	.49	.86	.561	-0.114	.096	-.012	.0092	.3549	.18	-.008	.0077	-.009	.00023	24.34	.25	.087			
rs6124901	20	45569796	G/A	Prev	1	.719	.007	.17	.95	.645	.020	.23	1	.715	.034	.053	.9	.908	.061	.18	1	.717	.074	.31	-.011	.019	-.008	.006	5.89	.38	.38			
rs6012558	20	47531286	G/A	Prev	.97	.578	.007	.18	.97	.663	-0.001	.93	1	.845	.027	.21	.84	.536	.050	.072	.89	.755	-.031	.7	-.008	.08	-.008	.0022	.00	.59	.59			
rs16996700	20	50981945	T/C	Prev	.98	.726	.027	.5e-7	.98	.707	-0.018	.29	.99	.729	-0.011	.52	.98	.697	.022	.42	-.96	.821	-.033	.7	-.023	1.8e-6	17.00	.31	.018	1.7e-7	.020	1.5e-12	10.44	.35
rs6091540	20	51087862	C/T	Prev	1	.717	.031	.6e-9	.99	.682	.062	.00016	1	.707	.007	.71	.99	.773	-0.011	.71	1	.690	.041	.57	.031	1.4e-10	46.47	.11	.019	8e-8	.023	4.4e-16	56.40	.043
rs13041126	20	51092996	T/C	Prev	1	.717	.031	.56e-9	.99	.684	.063	.00012	1	.708	.008	.64	1	.792	-0.004	.91	1	.690	.041	.57	.031	7.1e-11	41.03	.15	.020	1.5e-6	.025	2.4e-15	48.68	.083
rs11907932	20	51148656	A/G	KP	.97	.699	.032	.18e-9	.95	.625	.057	.00035	.97	.664	.017	.33	.96	.773	-0.006	.85	.97	.644	-.023	.74	.032	2.4e-11	26.43	.25	.019	8.3e-7	.024	8.5e-16	47.94	.087
rs2247627	20	54145086	G/A	Prev	1	.659	-0.018	.00046	.99	.653	-0.000	.99	.99	.572	-0.042	.0097	.93	.374	-0.030	.25	.98	.497	.003	.96	-.019	4.6e-5	.00	-.45	-.008	.051	-.013	2.9e-5	24.68	.25
rs2243930	20	54147462	G/A	Prev	1	.781	-0.022	.00013	.99	.789	-0.001	.97	.99	.616	-0.036	.03	.98	.844	-0.012	.73	.99	.709	-0.119	.092	-.022	1.7e-5	.00	-.42	-.013	.00042	-.017	6.3e-8	12.91	.33
rs11908421	20	54379667	T/C	Prev	.98	.802	.009	.16	.99	.835	-0.029	.15	.97	.867	-0.009	.71	.97	.559	-0.001	.95	.96	.796	.057	.48	-.001	.9	-.001	.0024	18.13	.3	.3	.3		
rs6025590	20	56070505	A/G	Prev	1	.381	.002	.68	.99	.357	-0.035	.031	1	.351	.048	.0035	1	.173	-0.077	.019	1	.260	.209	.0041	.007	.1	.83	61.6e-5	-.001	.9	.003	.34	80.88	8.4e-5
rs2057291	20	57472043	A/G	Prev	1	.341	.008	.12	1	.305	-0.003	.86	.96	.258	.006	.74	1	.232	-0.074	.013	1	.254	.001	.99	-.005	.24	45.19	.12	-.001	.86	-.002	.51	39.59	.14
rs6080584	20	60564086	G/C	Prev	.98	.332	-0.000	.97	.99	.393	-0.020	.21	.98	.347	.002	.92	.95	.469	.036	.16	.98	.424	.086	.19	.003	.6	16.63	.31	.006	.11	.005	.095	.25	.41
rs2828362	21	17483133	A/T	Prev	.94	.672	.003	.58	.93	.762	-0.016	.4	.97	.911	.011	.7	.96	.608	.017	.5	.94	.726	.038	.62	.003	.6	10.00	.81	.006	.13	.000	.86	.86	
rs11088559	21	22689344	G/A	Prev	.96	.984	-0.021	.26	1	.953	-0.017	.65	1	.821	.002	.92	.99	.916	.019	.67	.92	.957	.333	.044	-.003	.81	29.27	.23	.019	.11	.009	.32	31.12	.2
rs2836764	21	40291740	T/C	Prev	1	.371	-0.019	.00015	1	.529	-0.016	.29	1	.632	-0.022	.18	1	.618	.001	.97	1	.719	.048	.5	-.018	5.6e-5	.00	.83	-.016	4.2e-7	-.017	7.4e-11	.00	.9
rs2836768	21	40311493	G/T	Prev	.99	.605	.018	.00035	.98	.625	.030	.064	.99	.411	.028	.08	.97	.696	.019	.48	.98	.302	.028	.68	.019	1.3e-5	.00	.93	.018	2.8e-6	.018	1.6e-10	.00	.97
rs9893113	21	40315316	G/T	Prev	.99	.589	.018	.00019	.99	.614	.029	.074	.99	.408	.025	.12	1	.697	.015	.59	.97	.300	.029	.68	.019	1e-5	.00	.97	-.017	8.7e-6	.018	4.2e-10	.00	.98
rs4279413	21	46570896	A/C	Prev	.95	.452	-0.008	.12	.96	.531	-0.018	.24	.95	.498	.010	.36	.94	.400	.006	.83	.92	.437	-0.128	.06	-.007	.095	19.19	.29	-.018	3.9e-7	-.014	7.3e-7	41.13	.13
rs9977276	21	47436327	T/C	Prev	.95	.216	.003	.62	.99	.159	.021	.32	.89	.087	.038	.21	.97	.220	.032	.32	.9	.118	-.007	.95	.004	.44	.00	.52	.005	.15	.005	.1	.00	.68
rs17500093	22	17990258	C/G	Prev	.54	.958	-0.012	.45	.67	.935	-0.054	.16	.61	.882	.027	.39	.51	.974	.032	.84	.55	.949	.177	.37	-.009	.48	.00	.45	-.004	.76	-.007	.48	.00	.50
rs2291259	22	29430477	A/G	Prev	.97	.580	-0.003	.51	.98	.598	-0.033	.15	.98	.543	-0.003	.85	.96	.753	.005	.037	.96	.518	.050	.46	-.003	.48	42.07	.14	-.004	.22	-.004	.16	27.75	.23
rs2191249	22	29450923	A/G	Prev	1	.580	-0.005	.25	1	.602	-0.032	.011	1	.583	.030	.35	1	.813	.030	.35	1	.511	.039	.55	-.006	.4	12.02	.34	-.002	.59	-.003	.19	6.02	.38
rs4823006	22	29451671	A/G	Prev	1	.349	-0.005	.32	1	.550	-0.008	.62	1	.437	.004	.78	1	.690	.002	.93	1	.414	.075	.26	-.004	.38	.00	.77	-.002	.32	.00	.85	.85	
rs2092029	22	35652241	C/T	Prev	.99	.318	-0.008	.15	.99	.379	-0.023	.15	1	.429	-0.019	.24	.98	.702	-0.019	.52	.99	.416	-0.172	.009	-.011	.019	45.43	.12	-.003	.24	-.007	.015	40.10	.14
rs4820408	22	40049445	T/G	Prev	.99	.412	-0.018	.00023	.99	.368	.001	.95	.98	.567	.039	.0																		

Table S5. SNPs GWAS significant in the meta-analysis of GERA and GIANT. Chr, chromosome; Pos, Position; Allele, coded effect allele/other allele; Info, Impute2 imputation r^2 quality; Frq, frequency of effect allele; Eff, effect size.

SNP	Chr	Pos	Allele	Group	Info	Frq	Eff	P	I ²	hetp
rs1074657	1	243746634	T/C	GERA Non-Hispanic white	.96	.688	-.021	6.9e-5		
				GERA Latino	.95	.610	-.019	.24		
				GERA East Asian	.97	.502	-.026	.11		
				GERA African American	.98	.244	-.022	.44		
				GERA South Asian	.97	.530	-.035	.59		
				GERA Meta			-.021	5.8e-6	.00	1
				GIANT	.97	.312	-.014	.00018		
				GERA+GIANT			-.017	7.7e-9	.00	.92
				UKB Non-Hispanic white	.99	.683	-.011	8.6e-7		
				UKB Mixed/Other	1	.534	-.000	.99		
				UKB South Asian	1	.496	-.025	.096		
				UKB East Asian	.98	.495	-.016	.63		
				UKB African American	1	.200	-.013	.54		
				GERA+GIANT+UKB Meta			-.042	.00017	77.88	.0004
rs1396141	2	41673745	T/C	GERA Non-Hispanic white	.98	.630	.019	.00011		
				GERA Latino	.98	.745	.011	.52		
				GERA East Asian	.99	.941	.055	.098		
				GERA African American	.99	.839	.080	.02		
				GERA South Asian	.96	.729	-.005	.95		
				GERA Meta			.020	1.3e-5	11.68	.34
				GIANT	1	.600	.014	.00015		
				GERA+GIANT			.017	1.2e-8	9.43	.36
				UKB Non-Hispanic white	.99	.627	.010	7.3e-6		
				UKB Mixed/Other	1	.733	-.002	.9		
				UKB South Asian	1	.724	.020	.22		
				UKB East Asian	1	.949	-.076	.32		
				UKB African American	.97	.855	.041	.075		
				GERA+GIANT+UKB Meta			-.014	6.7e-16	33.41	.13
rs7580766	2	42939351	G/A	GERA Non-Hispanic white	1	.568	.017	.00033		
				GERA Latino	1	.644	.035	.03		
				GERA East Asian	1	.509	-.004	.79		
				GERA African American	.99	.788	.036	.25		
				GERA South Asian	.99	.796	.084	.27		
				GERA Meta			.017	6.2e-5	5.22	.38
				GIANT	1	.650	.014	.00015		
				GERA+GIANT			.015	4.3e-8	.00	.47
				UKB Non-Hispanic white	1	.557	.009	9e-5		
				UKB Mixed/Other	1	.676	-.002	.9		
				UKB South Asian	1	.776	.012	.49		
				UKB East Asian	.97	.521	-.036	.29		
				UKB African American	.98	.838	-.036	.099		
				GERA+GIANT+UKB Meta			.008	6.9e-6	67.08	.00074
rs6710871	2	143960593	A/G	GERA Non-Hispanic white	1	.142	.021	.0019		
				GERA Latino	1	.173	.039	.055		
				GERA East Asian	1	.128	.012	.63		
				GERA African American	.99	.216	.096	.0016		
				GERA South Asian	1	.213	-.035	.65		
				GERA Meta			.025	4.9e-5	44.21	.13
				GIANT	1	.138	.022	1e-5		
				GERA+GIANT			.023	2.2e-9	31.76	.2
				UKB Non-Hispanic white	1	.140	.019	3.7e-10		
				UKB Mixed/Other	1	.184	.043	.042		
				UKB South Asian	1	.202	.020	.28		
				UKB East Asian	.97	.109	.105	.051		
				UKB African American	1	.230	.015	.43		
				GERA+GIANT+UKB Meta			-.015	7.8e-9	44.82	.053
rs4857968	3	20714580	G/A	GERA Non-Hispanic white	1	.277	-.026	1.3e-6		
				GERA Latino	.99	.259	-.019	.3		
				GERA East Asian	1	.039	-.042	.3		
				GERA African American	.98	.067	.043	.39		
				GERA South Asian	1	.187	-.047	.59		
				GERA Meta			-.025	8.1e-7	.00	.7
				GIANT	1	.350	-.014	6.3e-5		
				GERA+GIANT			-.018	1.1e-9	5.74	.38
				UKB Non-Hispanic white	.99	.281	-.013	3.9e-8		
				UKB Mixed/Other	1	.177	-.028	.2		
				UKB South Asian	.96	.188	-.015	.45		
				UKB East Asian	.99	.030	-.137	.17		
				UKB African American	1	.042	-.029	.5		
				GERA+GIANT+UKB Meta			-.014	8.1e-15	55.25	.013
rs1436351	3	104617973	T/G	GERA Non-Hispanic white	1	.752	.013	.017		
				GERA Latino	.99	.666	.025	.12		
				GERA East Asian	1	.717	.036	.038		
				GERA African American	1	.547	.059	.019		
				GERA South Asian	1	.727	-.015	.84		
				GERA Meta			.018	.00031	18.75	.3
				GIANT	1	.725	.016	8.3e-6		
				GERA+GIANT			.016	1.4e-8	.25	.41
				UKB Non-Hispanic white	1	.747	.016	7.2e-11		
				UKB Mixed/Other	1	.697	-.007	.7		
				UKB South Asian	.99	.746	-.005	.79		
				UKB East Asian	.99	.714	.020	.59		
				UKB African American	.97	.525	.016	.32		
				GERA+GIANT+UKB Meta			.013	.0076	81.98	2.1e-6
rs4833079	4	38654681	T/C	GERA Non-Hispanic white	.98	.391	-.024	1.1e-6		
				GERA Latino	.96	.252	.001	.96		
				GERA East Asian	.95	.042	-.018	.64		
				GERA African American	.95	.163	-.020	.57		
				GERA South Asian	.95	.122	-.159	.11		
				GERA Meta			-.022	1.5e-6	.00	.44
				GIANT	1	.367	-.014	1.2e-5		
				GERA+GIANT			-.016	2.1e-10	18.68	.29
				UKB Non-Hispanic white	1	.422	-.011	2.2e-7		
				UKB Mixed/Other	1	.231	-.025	.23		
				UKB South Asian	.98	.136	-.016	.47		
				UKB East Asian	.92	.026	-.054	.62		
				UKB African American	.95	.146	.020	.4		
				GERA+GIANT+UKB Meta			.036	5.6e-20	52.60	.025
rs10019997	4	137048599	T/C	GERA Non-Hispanic white	1	.415	.021	2.1e-5		

SNP	Chr	Pos	Allele Group	Info	Freq	Eff	P	I ²	hetp
rs10063334	5	112760874	C/T	GERA Latino	1	.534	.027	.082	
				GERA East Asian	1	.721	.007	.69	
				GERA African American	.99	.521	.010	.69	
				GERA South Asian	1	.523	-.029	.66	
				GERA Meta		.020	7e-6	.00	.83
				GIANT	1	.392	.012	.0001	
				GERA+GIANT		.015	7.5e-9	.00	.62
				UKB Non-Hispanic white	1	.412	.016	3e-13	
				UKB Mixed/Other	1	.498	.009	.6	
				UKB South Asian	1	.522	.012	.42	
				UKB East Asian	.99	.767	.026	.51	
				UKB African American	.96	.539	.018	.26	
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.182	.020	.0011	
				GERA Latino	1	.341	.045	.0045	
				GERA East Asian	1	.207	.049	.012	
				GERA African American	.99	.495	.025	.32	
				GERA South Asian	1	.197	.063	.46	
				GERA Meta		.026	1.9e-6	.00	.41
				GIANT	1	.050	.028	.00024	
				GERA+GIANT		.026	1.9e-9	.00	.54
rs7730898	5	170459675	A/G	UKB Non-Hispanic white	1	.177	.009	.0022	
				UKB Mixed/Other	1	.267	.022	.26	
				UKB South Asian	1	.169	.023	.24	
				UKB East Asian	.99	.197	.006	.9	
				UKB African American	1	.544	-.027	.094	
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.97	.724	.028	3.4e-7	
				GERA Latino	.97	.735	-.008	.66	
				GERA East Asian	.99	.884	-.005	.84	
				GERA African American	.96	.784	.031	.32	
				GERA South Asian	.93	.887	.219	.036	
				GERA Meta		.024	1.5e-6	52.82	.076
				GIANT	1	.725	.013	.00016	
				GERA+GIANT		.016	5.1e-9	57.94	.036
				UKB Non-Hispanic white	1	.729	.018	4.2e-14	
				UKB Mixed/Other	1	.798	.008	.7	
				UKB South Asian	1	.888	.014	.54	
				UKB East Asian	.98	.901	.040	.48	
				UKB African American	.98	.780	.005	.79	
				GERA+GIANT+UKB Meta					
rs947612	6	73738661	G/A	GERA Non-Hispanic white	.98	.747	-.031	2.6e-8	
				GERA Latino	.96	.630	-.004	.83	
				GERA East Asian	.98	.223	-.014	.45	
				GERA African American	.96	.295	-.015	.59	
				GERA South Asian	.96	.639	-.065	.36	
				GERA Meta		-.027	6.3e-8	.00	.49
				GIANT	1	.758	-.012	.0053	
				GERA+GIANT		-.018	1.6e-8	41.25	.13
				UKB Non-Hispanic white	1	.752	-.013	4.6e-7	
				UKB Mixed/Other	1	.575	-.020	.27	
				UKB South Asian	1	.679	-.011	.46	
				UKB East Asian	1	.203	-.035	.39	
				UKB African American	1	.238	.038	.053	
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.396	-.017	.00041	
				GERA Latino	1	.311	-.026	.12	
				GERA East Asian	1	.406	-.007	.67	
				GERA African American	1	.228	-.044	.15	
				GERA South Asian	1	.224	.010	.89	
				GERA Meta		-.018	7.7e-5	.00	.81
rs901630	6	98539519	C/T	GIANT	1	.483	-.013	6e-5	
				GERA+GIANT		-.014	2.5e-8	.00	.79
				UKB Non-Hispanic white	1	.394	-.019	8.9e-19	
				UKB Mixed/Other	1	.314	-.022	.22	
				UKB South Asian	1	.229	.005	.78	
				UKB East Asian	1	.414	-.066	.048	
				UKB African American	1	.208	-.016	.41	
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.771	-.014	.013	
				GERA Latino	1	.847	-.022	.3	
				GERA East Asian	1	.933	-.029	.36	
				GERA African American	1	.945	-.046	.4	
				GERA South Asian	1	.872	.103	.27	
				GERA Meta		-.015	.0052	.00	.7
				GIANT	1	.758	-.017	2.5e-6	
				GERA+GIANT		-.016	4.3e-8	.00	.8
				UKB Non-Hispanic white	1	.760	-.011	1.5e-5	
				UKB Mixed/Other	1	.855	-.036	.13	
				UKB South Asian	1	.870	-.006	.79	
				UKB East Asian	1	.934	.069	.3	
rs6569648	6	130349119	C/T	UKB African American	1	.965	.002	.97	
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.418	-.019	.0001	
				GERA Latino	.99	.343	-.010	.53	
				GERA East Asian	.95	.705	.004	.83	
				GERA African American	.98	.117	-.005	.9	
				GERA South Asian	1	.480	-.031	.63	
				GERA Meta		-.017	.00019	.00	.76
				GIANT	1	.375	-.015	1.5e-6	
				GERA+GIANT		-.016	1e-9	.00	.86
				UKB Non-Hispanic white	1	.414	-.008	.00052	
				UKB Mixed/Other	1	.370	.022	.22	
				UKB South Asian	.99	.464	.007	.66	
				UKB East Asian	.94	.734	-.022	.58	
				UKB African American	1	.075	.013	.7	
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.96	.886	-.024	.0015	
				GERA Latino	.97	.889	-.051	.039	
				GERA East Asian	.93	.940	-.041	.24	
				GERA African American	.78	.951	-.016	.81	
rs9364687	6	163817911	G/T	GERA South Asian	.86	.891	-.171	.12	
				GERA Meta		-.028	9.8e-5	.00	.56
				GIANT	1	.867	-.022	3.6e-5	
				GERA+GIANT		-.024	1.6e-8	.00	.65
				UKB Non-Hispanic white	1	.880	-.018	9.7e-8	
				UKB Mixed/Other	.97	.910	-.021	.47	
				GERA Non-Hispanic white	.96	.886	-.024	.0015	
				GERA Latino	.97	.889	-.051	.039	
				GERA East Asian	.93	.940	-.041	.24	
				GERA African American	.78	.951	-.016	.81	
				GERA South Asian	.86	.891	-.171	.12	
				GERA Meta		-.028	9.8e-5	.00	.56
				GIANT	1	.867	-.022	3.6e-5	
				GERA+GIANT		-.024	1.6e-8	.00	.65
				UKB Non-Hispanic white	1	.880	-.018	9.7e-8	
				UKB Mixed/Other	.97	.910	-.021	.47	
				GERA Non-Hispanic white	.96	.886	-.024	.0015	
				GERA Latino	.97	.889	-.051	.039	
				GERA East Asian	.93	.940	-.041	.24	
				GERA African American	.78	.951	-.016	.81	
				GERA South Asian	.86	.891	-.171	.12	
				GERA Meta		-.028	9.8e-5	.00	.56
				GIANT	1	.867	-.022	3.6e-5	
				GERA+GIANT		-.024	1.6e-8	.00	.65
				UKB Non-Hispanic white	1	.880	-.018	9.7e-8	
				UKB Mixed/Other	.97	.910	-.021	.47	
rs6471932	8	62078904	T/A	UKB African American	1	.075	.013	.7	
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.96	.886	-.024	.0015	
				GERA Latino	.97	.889	-.051	.039	
				GERA East Asian	.93	.940	-.041	.24	
				GERA African American	.78	.951	-.016	.81	
				GERA South Asian	.86	.891	-.171	.12	
				GERA Meta		-.028	9.8e-5	.00	.56
				GIANT	1	.867	-.022	3.6e-5	
				GERA+GIANT		-.024	1.6e-8	.00	.65
				UKB Non-Hispanic white	1	.880	-.018	9.7e-8	
				UKB Mixed/Other	.97	.910	-.021	.47	
				GERA Non-Hispanic white	.96	.886	-.024	.0015	
				GERA Latino	.97	.889	-.051	.039	
				GERA East Asian	.93	.940	-.041	.24	
				GERA African American	.78	.951	-.016	.81	
				GERA South Asian	.86	.891	-.171	.12	
				GERA Meta		-.028	9.8e-5	.00	.56

SNP	Chr	Pos	Allele Group	Info	Freq	Eff	P	I ²	hetp
rs12352785	9	6956850	A/C	UKB South Asian	.96	.863	-.017 .45		
				UKB East Asian	.83	.923	.146 .032		
				UKB African American	.77	.958	-.038 .4		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.99	.687	-.021 4.9e-5		
				GERA Latino	.99	.758	-.027 .13		
				GERA East Asian	.97	.979	-.018 .74		
				GERA African American	.98	.771	-.063 .039		
				GERA South Asian	.99	.907	-.115 .3		
				GERA Meta				.00	.63
				GIANT	1	.742	-.016 1.6e-6		
				GERA+GIANT				.00	.56
				UKB Non-Hispanic white	.99	.685	-.008 .00044		
				UKB Mixed/Other	1	.768	-.037 .064		
				UKB South Asian	1	.895	-.013 .59		
rs118067556	10	63136165	C/T	UKB East Asian	.77	.993			
				UKB African American	.99	.781	-.023 .23		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.92	.038	-.055 2.1e-5		
				GERA Latino	.87	.025	-.033 .53		
				GERA East Asian	.66	.003	-.080 .63		
				GERA African American	.82	.009	-.051 .72		
				GERA South Asian	.88	.079	-.218 .079		
				GERA Meta				.00	.75
				GIANT	.71	.962	-.037 8.5e-5		
				GERA+GIANT				.00	.64
				UKB Non-Hispanic white	1	.029	-.029 9.3e-6		
				UKB Mixed/Other	1	.026	-.062 .23		
				UKB South Asian	1	.055	-.046 .14		
				UKB East Asian	1	.001			
rs10742752	11	45438374	C/T	UKB African American	1	.004			
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.619	.021 1.3e-5		
				GERA Latino	.98	.703	-.048 .0042		
				GERA East Asian	.96	.576	.017 .29		
				GERA African American	.97	.764	.040 .19		
				GERA South Asian	1	.673	.089 .19		
				GERA Meta				77.05	.0016
				GIANT	1	.642	.014 6.5e-6		
				GERA+GIANT				71.73	.0034
				UKB Non-Hispanic white	1	.612	.012 5e-8		
				UKB Mixed/Other	1	.670	.002 .91		
				UKB South Asian	.99	.655	.032 .042		
				UKB East Asian	.97	.567	-.055 .11		
				UKB African American	.99	.796	.021 .29		
rs11170468	12	39430048	A/C	GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.99	.235	-.013 .023		
				GERA Latino	.99	.173	-.000 1		
				GERA East Asian	.97	.021	-.036 .51		
				GERA African American	.98	.216	.014 .64		
				GERA South Asian	.96	.081	-.124 .31		
				GERA Meta				.00	.71
				GIANT	1	.192	-.019 7e-8		
				GERA+GIANT				.00	.6
				UKB Non-Hispanic white	1	.234	-.012 2.9e-6		
				UKB Mixed/Other	1	.160	.026 .24		
				UKB South Asian	1	.086	-.018 .51		
				UKB East Asian	.97	.011	-.192 .23		
				UKB African American	.98	.183	.008 .7		
				GERA+GIANT+UKB Meta					
rs1819844	12	68205604	A/G	GERA Non-Hispanic white	.99	.823	-.028 6.5e-6		
				GERA Latino	.99	.795	-.044 .024		
				GERA East Asian	.99	.766	.005 .78		
				GERA African American	.98	.898	.003 .94		
				GERA South Asian	.99	.793	-.087 .28		
				GERA Meta				16.92	.31
				GIANT	1	.833	-.015 9.3e-5		
				GERA+GIANT				32.58	.19
				UKB Non-Hispanic white	1	.829	-.014 8.1e-7		
				UKB Mixed/Other	1	.824	-.026 .22		
				UKB South Asian	1	.776	.004 .84		
				UKB East Asian	1	.745	-.071 .058		
				UKB African American	.91	.917	-.023 .44		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.99	.776	-.021 .00026		
rs2372716	12	99573426	C/T	GERA Latino	1	.845	-.006 .77		
				GERA East Asian	1	.983	.005 .94		
				GERA African American	.97	.944	-.067 .23		
				GERA South Asian	.97	.875	.031 .75		
				GERA Meta				.00	.81
				GIANT	1	.767	-.015 2.9e-5		
				GERA+GIANT				.00	.83
				UKB Non-Hispanic white	1	.779	-.015 1.2e-8		
				UKB Mixed/Other	1	.865	-.027 .28		
				UKB South Asian	.98	.889	-.004 .86		
				UKB East Asian	.83	.990	-.193 .3		
				UKB African American	.87	.950	.057 .15		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.98	.374	-.020 5.7e-5		
				GERA Latino	.98	.315	-.015 .36		
rs9595908	13	33184288	T/C	GERA East Asian	.99	.166	-.029 .17		
				GERA African American	.97	.258	-.017 .57		
				GERA South Asian	.96	.195	.068 .4		
				GERA Meta				.00	.84
				GIANT	1	.342	-.014 6e-6		
				GERA+GIANT				.00	.78
				UKB Non-Hispanic white	1	.370	-.017 1.6e-14		
				UKB Mixed/Other	1	.291	-.002 .93		
				UKB South Asian	1	.243	.001 .94		
				UKB East Asian	1	.157	.043 .34		
				UKB African American	.99	.250	-.027 .13		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.171	-.031 6.4e-7		
				GERA Latino	1	.151	-.022 .3		
				GERA East Asian	.98	.391	-.013 .43		
rs9563576	13	58670147	C/T	GERA African American	.99	.096	-.093 .032		
				GERA South Asian	.99	.392	-.070 .31		

SNP	Chr	Pos	Allele Group	Info	Freq	Eff	P	I ²	hetp
rs7161194	14	101529005	A/G	GERA Meta			-.030 9.7e-8	.00	.45
				GIANT	1	.208	-.018 5.4e-6		
				GERA+GIANT			-.022 9.7e-12	26.12	.24
				UKB Non-Hispanic white	1	.173	-.025 8.6e-18		
				UKB Mixed/Other	1	.205	-.018 .4		
				UKB South Asian	.99	.359	-.023 .13		
				UKB East Asian	.99	.390	-.002 .96		
				UKB African American	1	.082	-.018 .52		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.9	.662	-.022 2.6e-5		
				GERA Latino	.95	.640	-.010 .56		
				GERA East Asian	.89	.721	-.026 .17		
				GERA African American	.94	.493	-.009 .72		
				GERA South Asian	.86	.585	.041 .54		
				GERA Meta			-.021 1.5e-5	.00	.8
				GIANT	1	.642	-.017 2.5e-5		
				GERA+GIANT			-.019 1.5e-9	.00	.85
				UKB Non-Hispanic white	.91	.664	-.018 2.2e-13		
				UKB Mixed/Other	.9	.630	-.026 .16		
				UKB South Asian	.83	.636	-.015 .35		
				UKB East Asian	.88	.749	.012 .77		
				UKB African American	.89	.494	-.040 .016		
				GERA+GIANT+UKB Meta					
rs4238331	15	59012133	T/G	GERA Non-Hispanic white	.94	.714	-.023 3.1e-5		
				GERA Latino	.96	.624	-.021 .2		
				GERA East Asian	.97	.593	-.042 .011		
				GERA African American	.97	.508	-.038 .14		
				GERA South Asian	.91	.514	.014 .84		
				GERA Meta			-.024 3.7e-7	.00	.75
				GIANT	1	.717	-.012 .0011		
				GERA+GIANT			-.017 1.4e-8	18.14	.3
				UKB Non-Hispanic white	1	.717	-.006 .015		
				UKB Mixed/Other	1	.617	-.049 .0042		
				UKB South Asian	1	.547	-.017 .26		
				UKB East Asian	1	.555	.023 .48		
				UKB African American	1	.465	-.015 .34		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.169	-.021 .0008		
				GERA Latino	1	.218	-.022 .24		
				GERA East Asian	1	.710	-.031 .074		
				GERA African American	.98	.159	-.056 .1		
				GERA South Asian	1	.289	.014 .85		
				GERA Meta			-.023 3.6e-5	.00	.84
				GIANT	1	.183	-.018 .00023		
				GERA+GIANT			-.020 4e-8	.00	.85
				UKB Non-Hispanic white	1	.171	-.011 .0001		
				UKB Mixed/Other	1	.245	-.033 .1		
				UKB South Asian	1	.292	.013 .44		
				UKB East Asian	1	.745	-.022 .57		
				UKB African American	1	.148	-.003 .88		
				GERA+GIANT+UKB Meta					
rs1439620	15	93429646	A/G	GERA Non-Hispanic white	.99	.670	-.009 .09		
				GERA Latino	.98	.687	-.033 .048		
				GERA East Asian	.98	.912	-.061 .032		
				GERA African American	.98	.566	-.027 .29		
				GERA South Asian	.98	.630	.010 .88		
				GERA Meta			-.013 .0076	26.07	.25
				GIANT	1	.717	-.016 2.4e-6		
				GERA+GIANT			-.015 5e-8	12.58	.33
				UKB Non-Hispanic white	1	.684	-.003 .14		
				UKB Mixed/Other	1	.667	-.015 .4		
				UKB South Asian	1	.643	-.015 .33		
				UKB East Asian	.97	.927	.083 .21		
				UKB African American	1	.559	-.002 .9		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	.97	.283	.020 .00014		
				GERA Latino	.97	.340	.010 .55		
				GERA East Asian	.96	.134	.026 .28		
				GERA African American	.97	.133	.112 .0034		
				GERA South Asian	.94	.171	-.011 .9		
				GERA Meta			.021 1.8e-5	36.46	.18
				GIANT	1	.250	.016 8e-6		
				GERA+GIANT			.018 9.3e-10	27.51	.23
				UKB Non-Hispanic white	1	.279	.006 .019		
				UKB Mixed/Other	1	.221	.053 .0092		
				UKB South Asian	1	.167	.022 .26		
				UKB East Asian	.97	.106	.030 .58		
				UKB African American	1	.097	-.021 .44		
				GERA+GIANT+UKB Meta					
rs11081818	18	31251088	A/G	GERA Non-Hispanic white	.99	.439	.023 1.5e-6		
				GERA Latino	.99	.535	.008 .6		
				GERA East Asian	.98	.768	.010 .58		
				GERA African American	.97	.341	.036 .18		
				GERA South Asian	.95	.434	-.082 .24		
				GERA Meta			.021 1.5e-6	.00	.44
				GIANT	1	.425	.013 .0004		
				GERA+GIANT			.016 6.4e-9	12.44	.34
				UKB Non-Hispanic white	1	.445	.013 1.7e-9		
				UKB Mixed/Other	1	.457	-.014 .42		
				UKB South Asian	1	.492	.009 .55		
				UKB East Asian	1	.792	-.094 .021		
				UKB African American	.98	.314	.007 .66		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.530	.019 8.4e-5		
				GERA Latino	.98	.534	.022 .15		
				GERA East Asian	1	.571	.009 .58		
				GERA African American	1	.175	.011 .74		
				GERA South Asian	1	.666	-.020 .78		
				GERA Meta			.018 3.3e-5	.00	.94
				GIANT	1	.542	.015 7.1e-5		
				GERA+GIANT			.016 1.1e-8	.00	.95
				UKB Non-Hispanic white	1	.519	.013 3.9e-10		
				UKB Mixed/Other	1	.476	.039 .025		
				UKB South Asian	1	.632	-.015 .33		
				UKB East Asian	1	.583	-.028 .4		
				UKB African American	1	.122	-.033 .22		
				GERA+GIANT+UKB Meta					
rs6142096	20	32686658	A/G	GERA Non-Hispanic white	1	.530	.019 8.4e-5		
				GERA Latino	.98	.534	.022 .15		
				GERA East Asian	1	.571	.009 .58		
				GERA African American	1	.175	.011 .74		
				GERA South Asian	1	.666	-.020 .78		
				GERA Meta			.018 3.3e-5	.00	.94
				GIANT	1	.542	.015 7.1e-5		
				GERA+GIANT			.016 1.1e-8	.00	.95
				UKB Non-Hispanic white	1	.519	.013 3.9e-10		
				UKB Mixed/Other	1	.476	.039 .025		
				UKB South Asian	1	.632	-.015 .33		
				UKB East Asian	1	.583	-.028 .4		
				UKB African American	1	.122	-.033 .22		
				GERA+GIANT+UKB Meta					
				GERA Non-Hispanic white	1	.530	.019 8.4e-5		
				GERA Latino	.98	.534	.022 .15		
				GERA East Asian	1	.571	.009 .58		
				GERA African American	1	.175	.011 .74		
				GERA South Asian	1	.666	-.020 .78		
				GERA Meta			.018 3.3e-5	.00	.94
				GIANT	1	.542	.015 7.1e-5		
				GERA+GIANT			.016 1.1e-8	.00	.95
				UKB Non-Hispanic white	1	.519	.013 3.9e-10		
				UKB Mixed/Other	1	.476	.039 .025		
				UKB South Asian	1	.632	-.015 .33		
				UKB East Asian	1	.583	-.028 .4		
				UKB African American	1	.122	-.033 .22		
				GERA+GIANT+UKB Meta					

SNP	Chr	Pos	Allele	Group	Info	Freq	Eff	P	I ²	hetp
rs17759796	22	22190163	A/C	GERA Non-Hispanic white	1	.149	.025	.00018		
				GERA Latino	.99	.113	.024	.34		
				GERA East Asian	1	.010	.047	.55		
				GERA African American	.99	.064	.006	.9		
				GERA South Asian	.99	.115	.029	.78		
				GERA Meta			.025	9.9e-5	.00	.99
				GIANT	1	.133	.018	4.2e-5		
				GERA+GIANT			.020	2.5e-8	.00	.96
				UKB Non-Hispanic white	1	.148	.011	.00051		
				UKB Mixed/Other	1	.114	-.005	.86		
				UKB South Asian	1	.117	-.019	.42		
				UKB East Asian	.98	.003				
				UKB African American	1	.059	.024	.48		
				GERA+GIANT+UKB Meta						

Table S6. Conditional SNPs. Conditional SNPs within +/- 0.5Mb of a previously- or newly-identified BMI-associated loci with genome-wide significance. SNP rs62106258 is a novel conditional SNP at rs10188334 near *TMEM18*, identified in GERA, with replication in UKB.

Lead SNP	Lead Chr	Lead Pos	SNP	Pos	Allele	Cohort	Freq	r ²	info	Eff U	P U	Eff J	P J
rs10188334	2	653874	rs10188334	653874	C/T	GERA non-Hispanic white	0.822	0.96	0.054	8.1e-17	0.055	3e-17	
				653874		GERA Latino	0.852	0.98	0.116	1.2e-07	0.115	1.8e-07	
				653874		GERA East Asian	0.909	0.973	0.080	0.0047	0.081	0.0042	
				653874		GERA African American	0.868	0.948	0.023	0.54	0.023	0.54	
				653874		GERA South Asian	0.855	0.933	-0.002	0.98	-0.001	0.99	
			rs62106258	653874		GERA Meta			0.059	8.1e-23	0.060	3.1e-23	
				417167	T/C	GERA non-Hispanic white	0.952	0.986	0.097	3.4e-17	0.098	1.2e-17	
				417167		GERA Latino	0.961	0.823	0.065	0.14	0.053	0.23	
				417167		GERA East Asian	0.994	0.534	0.267	0.058	0.274	0.052	
				417167		GERA African American	0.982	0.614	-0.046	0.7	-0.046	0.7	
				417167		GERA South Asian	0.992	1	0.113	0.76	0.113	0.76	
				417167		GERA Meta			0.095	8.6e-18	0.095	5.8e-18	
rs921971	18	57861663	rs921971	57861663	T/C	GERA non-Hispanic white	0.735	1	-0.045	7.2e-16	-0.043	1.3e-14	
				57861663		GERA Latino	0.816	1	-0.047	0.015	-0.045	0.021	
				57861663		GERA East Asian	0.825	1	-0.061	0.0046	-0.060	0.0053	
				57861663		GERA African American	0.841	1	-0.085	0.0067	-0.085	0.0067	
				57861663		GERA South Asian	0.639	1	0.071	0.31	0.060	0.39	
			rs77762545	57861663		GERA Meta			-0.046	1e-19	-0.044	2.7e-18	
				58077407	T/A	GERA non-Hispanic white	0.981	0.982	0.100	3.7e-08	0.090	7.1e-07	
				58077407		GERA Latino	0.991	0.945	0.278	0.00096	0.271	0.0013	
				58077407		GERA East Asian	0.997	0.957	0.420	0.003	0.414	0.0035	
				58077407		GERA African American	0.983	0.945	0.012	0.91	-0.001	0.99	
				58077407		GERA South Asian	0.974	0.979	-0.304	0.14	-0.283	0.18	
				58077407		GERA Meta			0.107	6.3e-10	0.097	1.8e-08	

Table S7. Sex heterogeneity tests at novel and previously known loci. P, previously-identified, G, GERA-identified, GG, GERA+GIANT-identified.

SNP	Chr	Pos	Allele	Type	M Eff	M SE	F Eff	F SE	Meta Eff	Meta P	Meta i^2	Meta Het.	P
rs2803328	1	1874326	C/G	P	-0.0012	0.0069	-0.0041	0.0058	-0.0029	0.52	0	0.74	
rs7535528	1	2444414	G/A	P	0.025	0.009	0.011	0.0076	0.017	0.0041	30	0.23	
rs12711521	1	11090916	C/A	P	0.0027	0.0083	-0.0069	0.007	-0.0029	0.59	0	0.38	
rs3766160	1	15808872	G/A	P	0.027	0.0077	0.0021	0.0065	0.012	0.012	84	0.012	
rs10799790	1	23418153	C/T	P	0.011	0.0087	0.0072	0.0073	0.0089	0.11	0	0.71	
rs2076463	1	27971092	A/G	P	0.014	0.017	2.3e-05	0.014	0.0057	0.6	0	0.54	
rs2271928	1	32127953	G/A	P	0.012	0.0071	0.0046	0.006	0.0077	0.092	0	0.42	
rs2228552	1	32165495	G/T	P	-0.02	0.0084	-0.0061	0.007	-0.012	0.03	35	0.21	
rs2296172	1	39835817	A/G	P	-0.041	0.0083	-0.025	0.007	-0.032	2.9e-09	54	0.14	
rs1707322	1	46505147	A/G	P	-0.0045	0.0074	0.00088	0.0062	-0.0013	0.78	0	0.58	
rs977747	1	47684677	T/G	P	0.011	0.0071	0.02	0.0059	0.017	0.00024	0	0.33	
rs11583200	1	50559820	C/T	P	0.0078	0.0071	0.027	0.0059	0.019	1.9e-05	78	0.033	
rs12140153	1	62579891	G/T	P	0.026	0.014	0.037	0.012	0.032	0.0004	0	0.54	
rs2481665	1	62594677	T/C	P	0.028	0.0072	0.019	0.006	0.022	1.2e-06	0	0.33	
rs11209943	1	72750500	A/G	P	-0.038	0.0072	-0.025	0.006	-0.03	5.4e-11	48	0.17	
rs12042908	1	74997762	A/G	P	0.016	0.007	0.017	0.0058	0.017	0.00019	0	0.9	
rs4130548	1	78463868	T/C	P	-0.028	0.0075	-0.024	0.0062	-0.026	9.8e-08	0	0.74	
rs540742	1	78585086	T/C	P	0.027	0.0081	0.011	0.0067	0.017	0.00076	54	0.14	
rs11165643	1	96924097	C/T	P	-0.011	0.007	-0.013	0.0058	-0.013	0.0046	0	0.82	
rs1801265	1	98348885	G/A	P	0.0065	0.0084	0.0047	0.007	0.0054	0.31	0	0.87	
rs11185092	1	107886278	A/G	P	-0.012	0.0081	-0.023	0.0067	-0.019	0.00031	16	0.27	
rs62623713	1	110019439	A/G	P	-0.038	0.015	-0.0071	0.013	-0.02	0.043	59	0.12	
rs17024393	1	110154688	T/C	P	-0.018	0.022	-0.024	0.018	-0.022	0.12	0	0.82	
rs197412	1	112308953	T/C	P	-0.029	0.0069	-0.016	0.0058	-0.021	1.3e-06	51	0.15	
rs10923724	1	119546842	C/T	P	0.014	0.0067	0.021	0.0057	0.018	2.8e-05	0	0.39	
rs4512652	1	151115690	G/C	P	0.0055	0.0077	0.02	0.0064	0.014	0.0045	51	0.15	
rs2297792	1	156011444	T/C	P	-0.0047	0.0072	-0.0064	0.006	-0.0057	0.21	0	0.86	
rs347313	1	162304276	A/G	P	-0.0049	0.0069	-0.0032	0.0057	-0.0039	0.38	0	0.85	
rs10913118	1	175954755	A/C	P	-0.0086	0.0075	-0.0046	0.0062	-0.0062	0.19	0	0.68	
rs574367	1	177873210	G/T	P	-0.032	0.0086	-0.06	0.0072	-0.049	1.5e-18	84	0.012	
rs591120	1	177902753	G/C	P	-0.0086	0.0068	-0.023	0.0057	-0.017	7.8e-05	64	0.096	
rs491055	1	190308834	A/G	P	0.022	0.0069	0.022	0.0058	0.022	9.7e-07	0	0.99	
rs1998710	1	190670884	C/T	P	-0.0071	0.0068	-0.0069	0.0057	-0.007	0.11	0	0.99	
rs10754220	1	197244290	G/A	P	0.034	0.0077	0.014	0.0064	0.022	8.6e-06	74	0.049	
rs16849342	1	201754444	G/C	P	-0.019	0.017	-0.023	0.014	-0.021	0.042	0	0.85	
rs2820312	1	201869257	G/A	P	-0.038	0.0075	-0.035	0.0062	-0.037	2.1e-14	0	0.74	
rs823114	1	205719532	G/A	P	0.004	0.0068	0.0062	0.0057	0.0053	0.22	0	0.8	
rs1704198	1	213910494	T/G	P	-0.011	0.008	0.0044	0.0067	-0.0021	0.68	56	0.13	
rs9786986	1	235656632	G/T	P	0.0024	0.0096	-0.012	0.0081	-0.006	0.33	23	0.42	
rs1074657	1	243746634	T/C	GG	0.016	0.0073	0.024	0.0062	0.021	1.3e-05	0	0.26	
rs62106258	2	417167	T/C	G	0.079	0.017	0.1	0.014	0.093	9e-18	17	0.27	
rs13021737	2	632348	A/G	P	-0.045	0.009	-0.06	0.0076	-0.054	2.3e-20	37	0.21	
rs10929925	2	6155557	C/A	P	0.011	0.0068	0.014	0.0057	0.013	0.0028	0	0.72	
rs111612372	2	20433218	T/C	P	-0.0087	0.0073	0.0049	0.0061	-0.00068	0.88	52	0.15	
rs1550116	2	25022598	A/G	P	0.0055	0.0096	-0.032	0.008	-0.017	0.0062	89	0.0024	
rs713586	2	25158008	T/C	P	-0.02	0.0068	-0.042	0.0057	-0.033	1.3e-13	84	0.013	
rs1561288	2	25369002	C/T	P	0.0076	0.0079	0.013	0.0065	0.011	0.028	0	0.57	
rs11126666	2	269928811	G/A	P	-0.01	0.0082	-0.017	0.0068	-0.014	0.0061	0	0.51	
rs3739081	2	26955621	A/G	P	0.015	0.0069	0.024	0.0058	0.02	7.3e-06	0	0.33	
rs6734118	2	37559355	C/A	P	-0.018	0.0079	-0.0068	0.0066	-0.011	0.026	13	0.28	
rs77489951	2	38750287	C/T	P	-0.0018	0.029	-0.0073	0.025	-0.005	0.79	0	0.89	
rs1396141	2	41673745	C/T	GG	-0.022	0.0074	-0.017	0.0061	-0.019	5.4e-05	0	0.65	
rs7580766	2	42939351	A/G	GG	-0.014	0.0069	-0.021	0.0057	-0.018	3.9e-05	0	0.44	
rs4596023	2	48955683	A/G	P	-0.0032	0.0077	-0.0068	0.0064	-0.0053	0.28	0	0.71	
rs10174398	2	51195601	T/C	P	0.0096	0.0082	0.0092	0.0068	0.0093	0.074	0	0.97	
rs10208649	2	54161363	T/C	P	0.017	0.014	0.0077	0.012	0.011	0.21	0	0.63	
rs929641	2	58792377	A/G	P	0.02	0.0069	0.027	0.0058	0.024	3.7e-08	0	0.4	
rs13011109	2	58857419	G/C	P	0.025	0.007	0.014	0.0058	0.019	3.1e-05	34	0.22	
rs4671328	2	58935282	T/C	P	0.03	0.0068	0.027	0.0057	0.028	1.1e-10	0	0.72	
rs1016287	2	59305625	T/C	P	0.022	0.0076	0.014	0.0063	0.017	0.00033	0	0.45	
rs11688816	2	63053048	G/A	P	0.016	0.0068	0.0046	0.0057	0.0093	0.034	39	0.2	
rs17016673	2	79497779	G/G	P	-0.012	0.01	-0.036	0.0087	-0.026	8e-05	66	0.086	
rs4851287	2	100915772	A/G	P	0.01	0.0073	0.0073	0.0061	0.0084	0.073	0	0.78	
rs1451533	2	105466005	G/A	P	-0.023	0.0076	-0.0061	0.0063	-0.013	0.0069	67	0.081	
rs4988235	2	136608646	G/A	P	-0.025	0.0069	-0.01	0.0058	-0.016	0.00022	66	0.087	
rs12617004	2	142615136	G/C	P	0.0029	0.008	-0.00081	0.0067	0.00072	0.89	0	0.72	
rs2890652	2	142959931	T/C	P	-0.011	0.0095	-0.023	0.0079	-0.018	0.0026	0	0.34	
rs6710871	2	143960593	G/A	GG	-0.012	0.0095	-0.031	0.008	-0.023	0.00016	53	0.14	
rs1460676	2	164567689	T/C	P	-0.02	0.0089	-0.011	0.0075	-0.014	0.012	0	0.42	
rs3769885	2	165592390	G/A	P	-0.012	0.0068	-0.00064	0.0056	-0.0054	0.21	43	0.19	
rs2390669	2	169091942	A/C	P	-0.00044	0.0096	-0.0092	0.008	-0.0056	0.36	0	0.48	
rs6433857	2	181517996	C/T	P	-0.013	0.0071	0.016	0.0059	0.0042	0.35	90	0.0012	
rs11679338	2	181606895	C/T	P	-0.022	0.0072	-0.021	0.0061	-0.022	3.3e-06	0	0.97	
rs17406900	2	203784202	A/G	P	-0.0025	0.0069	-0.0048	0.0057	-0.0039	0.38	0	0.79	
rs7569376	2	205385322	T/C	P	-0.00087	0.008	0.016	0.0067	0.0088	0.087	59	0.12	
rs972540	2	207244783	A/G	P	-0.013	0.0078	-0.02	0.0065	-0.017	0.00055	0	0.5	
rs17203016	2	208255518	A/G	P	-0.02	0.0092	-0.014	0.0076	-0.016	0.0053	0	0.63	
rs10804189	2	211988980	A/G	P	0.0055	0.0075	0.019	0.0063	0.013	0.0058	45	0.18	
rs6435678	2	212710468	G/C	P	-1.6e-05	0.011	-0.0053	0.0089	-0.0032	0.64	0	0.7	
rs7599312	2	213413231	G/A	P	0.022	0.0081	0.021	0.0068	0.021	4.1e-05	0	0.91	
rs492400	2	219349752	C/T	P	0.014	0.007	0.0077	0.0058	0.01	0.021	0	0.47	
rs4072096	2	227036603	A/C	P	-0.014	0.0067	-0.013	0.0057	-0.014	0.0017	0	0.92	
rs7601000	2	242610773	T/A	P	0.013	0.0099	-0.0031	0.0083	0.0036	0.57	37	0.21	
rs2574704	3	11655381	T/C	P	0.0002	0.0071	-0.011	0.0059	-0.0063	0.17	29	0.24	
rs1801282	3	12393125	C/G	P	-0.021	0.011	-0.023	0.009	-0.022	0.0014	0	0.89	
rs9845966	3	13433158	T/G	P	0.0028	0.007	0.0082	0.0059	0.006	0.18	0	0.56	
rs4857968	3	20714580	G/A	GG	0.029	0.0079	0.024	0.0066	0.026	3.5e-07	0	0.63	
rs6804842	3	25106437	A/G	P	-0.0049	0.0069	-0.021	0.0058	-0.014	0.0012	68	0.076	
rs754635	3	42305131	C/G	P	-0.031	0.01	-0.037	0.0084	-0.035	7.8e-08	0	0.62	
rs56084453	3	44762830	A/G	P	0.026	0.0087	0.014	0.0072	0.019	0.00065	17	0.27	
rs3732530	3	47618953	C/A	P	-0.0002	0.0072	0.0073	0.006	0.0042	0.36	0	0.42	
rs2230590	3	49936102	T/C	P	-0.031	0.0071	-0.029	0.006	-0.03	6.9e-11	0	0.8	
rs13100173	3	50332697	G/A	P	-0.026	0.0082	-0.016	0.0068	-0.02	0.00013	0	0.38	

SNP	Chr	Pos	Allele	Type	M Eff	M SE	F Eff	F SE	Meta Eff	Meta P	Meta I ²	Meta Het.	P
rs6794880	3	84451512	G/A	P	-0.02	0.0098	-0.0072	0.0082	-0.013	0.046	3	0.31	
rs9852859	3	85842341	T/C	P	-0.019	0.0088	-0.021	0.0073	-0.02	0.00033	0	0.83	
rs12495178	3	85886077	T/C	P	0.026	0.0071	0.019	0.0059	0.022	1.1e-06	0	0.47	
rs7653652	3	88189341	T/C	P	0.002	0.0094	-0.012	0.0078	-0.0064	0.29	26	0.25	
rs2173039	3	89142175	G/C	P	-0.0092	0.0078	-0.005	0.0065	-0.0067	0.18	0	0.68	
rs1436351	3	104617973	G/T	GG	-0.012	0.0077	-0.02	0.0064	-0.017	0.00066	0	0.46	
rs7640424	3	107820063	C/T	P	0.012	0.0079	0.0069	0.0066	0.0089	0.078	0	0.63	
rs2868975	3	116935323	G/A	P	0.0073	0.0087	0.022	0.0073	0.016	0.0041	42	0.19	
rs1542829	3	130137471	G/A	P	0.0092	0.013	-0.0067	0.011	-0.00018	0.98	0	0.34	
rs876424	3	131637676	T/G	P	-0.02	0.0071	-0.012	0.0059	-0.015	0.00075	0	0.39	
rs7621025	3	136272246	T/C	P	-0.02	0.0078	-0.0077	0.0065	-0.013	0.011	30	0.23	
rs1052618	3	136574501	A/G	P	-0.021	0.0074	-0.011	0.0062	-0.015	0.0015	0	0.32	
rs1720825	3	138180803	A/G	P	0.027	0.009	0.016	0.0075	0.02	0.00035	0	0.38	
rs16851483	3	141275436	G/T	P	-0.015	0.013	-0.014	0.01	-0.014	0.079	0	0.96	
rs9438	3	154018887	G/C	P	-0.012	0.0069	-0.013	0.0058	-0.013	0.0038	0	0.87	
rs2649734	3	157347640	G/A	P	0.0099	0.007	0.008	0.0059	0.0088	0.052	0	0.83	
rs13069244	3	180441172	G/A	P	-0.0026	0.014	-0.012	0.012	-0.0082	0.35	0	0.59	
rs11546878	3	183976103	C/T	P	0.0019	0.0094	0.0039	0.0078	0.0031	0.61	0	0.87	
rs2178403	3	184039666	A/G	P	0.0063	0.0086	0.021	0.0072	0.015	0.0067	42	0.19	
rs4686392	3	185524081	A/G	P	0.012	0.0075	-0.0025	0.0062	0.0036	0.45	57	0.13	
rs9816226	3	185834499	A/T	P	-0.059	0.009	-0.026	0.0076	-0.039	1.3e-11	87	0.0047	
rs34811474	4	25408838	G/A	P	0.025	0.0087	0.044	0.0072	0.036	5e-11	65	0.091	
rs16992647	4	36813105	C/T	P	0.02	0.009	0.01	0.0076	0.014	0.013	0	0.41	
rs4833079	4	38654681	T/C	GG	0.019	0.0073	0.023	0.0061	0.021	4.4e-06	0	0.6	
rs12641981	4	45179883	C/T	P	-0.03	0.0069	-0.029	0.0058	-0.029	3.4e-11	0	0.93	
rs17001654	4	77129568	C/P	P	0.0027	0.0096	-0.013	0.0081	-0.0065	0.29	35	0.22	
rs13107325	4	103188709	C/T	P	-0.049	0.014	-0.062	0.012	-0.057	1.3e-10	0	0.47	
rs4834272	4	113313986	T/C	P	-0.016	0.0072	-0.0042	0.006	-0.0092	0.046	40	0.2	
rs3749591	4	120214030	T/G	P	-0.01	0.0073	-0.017	0.006	-0.014	0.0027	0	0.5	
rs10019997	4	137048599	C/T	GG	-0.023	0.0069	-0.019	0.0058	-0.021	2.2e-06	0	0.65	
rs11727676	4	145659064	T/A	P	0.033	0.012	0.0087	0.01	0.018	0.019	55	0.13	
rs4865796	5	53272664	G/A	P	0.017	0.0076	0.012	0.0064	0.014	0.0052	0	0.62	
rs7720894	5	60733933	G/C	P	0.0028	0.0069	0.0082	0.0057	0.006	0.18	0	0.54	
rs1503526	5	63020706	T/C	P	-0.013	0.0069	-0.016	0.0058	-0.015	0.0008	0	0.79	
rs1035491	5	63962177	A/G	P	-0.0058	0.0073	0.0063	0.0061	0.0013	0.78	38	0.2	
rs3811987	5	74324548	A/G	P	0.017	0.0075	0.011	0.0062	0.014	0.0046	0	0.59	
rs6893216	5	74442964	T/C	P	0.022	0.01	0.0097	0.0086	0.015	0.025	0	0.37	
rs2307111	5	75003678	T/C	P	0.04	0.0069	0.024	0.0058	0.03	8e-12	69	0.07	
rs6870983	5	87697533	C/T	P	0.014	0.0082	0.029	0.0069	0.023	1.6e-05	52	0.15	
rs16903285	5	87978252	T/C	P	-0.029	0.0093	-0.022	0.0078	-0.025	2.5e-05	0	0.6	
rs6234	5	95728974	G/C	P	-0.018	0.0077	-0.012	0.0064	-0.015	0.0028	0	0.53	
rs261967	5	95850250	A/C	P	-0.018	0.0068	-0.019	0.0057	-0.019	1.8e-05	0	0.92	
rs10062657	5	95867908	C/A	P	0.023	0.01	0.023	0.0085	0.023	0.00051	0	0.98	
rs30187	5	96124330	T/C	P	-0.02	0.007	-0.012	0.0059	-0.015	0.00081	0	0.37	
rs40067	5	107439012	G/A	P	0.019	0.0088	0.015	0.0074	0.016	0.0039	0	0.72	
rs1045706	5	108714298	T/C	P	-0.0066	0.0071	-0.016	0.0059	-0.012	0.006	14	0.28	
rs459552	5	112176756	T/A	P	0.012	0.0083	-0.0046	0.007	0.0021	0.7	56	0.13	
rs4308481	5	122652106	C/T	P	0.011	0.0069	0.024	0.0058	0.019	2.9e-05	50	0.16	
rs4357030	5	124316031	C/T	P	-0.0063	0.0079	-0.0024	0.0067	-0.004	0.43	0	0.7	
rs4836133	5	124332103	C/A	P	-0.012	0.0069	-0.013	0.0057	-0.012	0.0053	0	0.91	
rs329120	5	133861756	C/T	P	0.0093	0.0069	0.012	0.0058	0.011	0.016	0	0.81	
rs13174863	5	139080745	A/G	P	-0.0039	0.011	-0.03	0.0095	-0.019	0.0081	68	0.078	
rs815610	5	153517178	C/G	P	0.015	0.007	0.023	0.0059	0.02	9.6e-06	0	0.39	
rs7730898	5	170459675	G/A	GG	-0.011	0.0079	-0.029	0.0066	-0.022	1.6e-05	68	0.078	
rs3849724	5	173290977	G/T	P	0.0076	0.007	0.011	0.0058	0.0094	0.035	0	0.74	
rs7715356	5	179129492	A/G	P	-0.009	0.0074	0.0015	0.0062	-0.0028	0.55	17	0.27	
rs2228210	6	12122174	A/G	P	0.017	0.0072	0.0053	0.006	0.01	0.027	38	0.2	
rs2206734	6	20694884	C/T	P	0.0057	0.0085	0.016	0.0071	0.012	0.033	0	0.36	
rs183975233	6	32437160	T/A	P	0.0013	0.0073	-0.001	0.0061	-6.1e-05	0.99	0	0.81	
rs943466	6	33731787	G/A	P	0.015	0.0082	0.012	0.0068	0.013	0.014	0	0.76	
rs10947487	6	34189612	A/G	P	0.026	0.015	-0.008	0.012	0.0058	0.53	69	0.073	
rs206936	6	34302869	A/G	P	-0.022	0.008	-0.02	0.0067	-0.021	4.8e-05	0	0.89	
rs7757419	6	34439569	A/T	P	-0.0043	0.009	-0.029	0.0075	-0.019	0.00099	78	0.033	
rs41312309	6	34498328	C/T	P	-0.0021	0.014	-0.021	0.012	-0.013	0.15	4	0.31	
rs6457796	6	34828553	T/C	P	-0.014	0.0076	-0.022	0.0064	-0.019	9.7e-05	0	0.43	
rs2033529	6	40348653	A/G	P	-0.019	0.0077	-0.014	0.0065	-0.016	0.00099	0	0.61	
rs78648104	6	50683009	T/C	P	0.026	0.012	0.025	0.01	0.026	0.00077	0	0.95	
rs2206277	6	50798526	C/T	P	-0.028	0.0086	-0.031	0.0072	-0.03	5.1e-08	0	0.8	
rs12199003	6	55196587	C/T	P	0.00023	0.0068	-0.0056	0.0058	-0.0032	0.47	0	0.51	
rs513357	6	69558698	A/G	G	0.036	0.01	0.039	0.0087	0.038	1.3e-08	0	0.84	
rs947612	6	73738661	G/A	GG	0.028	0.0078	0.026	0.0065	0.027	7.9e-08	0	0.91	
rs17057164	6	97410536	T/C	P	0.0033	0.0092	-0.0014	0.0077	0.00054	0.93	0	0.7	
rs4498364	6	97613773	C/T	P	0.026	0.0074	0.0097	0.0062	0.016	0.00062	64	0.098	
rs901630	6	98539519	C/T	GG	0.017	0.007	0.017	0.0058	0.017	0.00014	0	0.94	
rs9400239	6	108977663	T/C	P	-0.025	0.0074	-0.021	0.0062	-0.023	1.3e-06	0	0.73	
rs2357760	6	120213880	G/A	P	-0.0054	0.0072	-0.012	0.006	-0.0092	0.046	0	0.49	
rs6569648	6	130349119	C/T	GG	0.022	0.0084	0.0099	0.0071	0.015	0.00055	20	0.26	
rs13201877	6	137675541	A/G	P	-0.018	0.01	0.0016	0.0087	-0.0064	0.33	53	0.15	
rs2185027	6	153381622	A/C	P	-0.0094	0.0073	-0.02	0.0061	-0.016	0.00074	24	0.25	
rs487152	6	160774486	C/A	P	-0.022	0.0068	-0.022	0.0057	-0.022	3.3e-07	0	1	
rs13191362	6	163033350	A/G	P	0.028	0.011	0.014	0.0091	0.019	0.0061	0	0.33	
rs9364687	6	163817911	G/T	GG	0.00075	0.007	0.025	0.0059	0.015	0.00091	86	0.0082	
rs1830074	7	6718674	T/C	P	-0.0014	0.0077	-0.0095	0.0065	-0.0061	0.22	0	0.42	
rs10261878	7	25950545	A/C	P	-0.012	0.013	-0.021	0.011	-0.017	0.04	0	0.61	
rs215607	7	32338337	G/A	P	0.031	0.0081	0.021	0.0068	0.025	1.2e-06	0	0.36	
rs10269783	7	49616203	G/A	P	-0.024	0.007	-0.0048	0.0058	-0.013	0.0042	78	0.032	
rs11765748	7	50615616	T/A	P	0.012	0.0068	0.013	0.0057	0.013	0.0035	0	0.89	
rs6947395	7	69406661	A/T	P	-0.0088	0.009	-0.019	0.0076	-0.015	0.012	0	0.4	
rs1949804	7	69768826	T/G	P	-0.0013	0.015	-0.042	0.013	-0.025	0.01	77	0.038	
rs38314	7	70067315	G/A	P	0.0017	0.0069	0.0038	0.0058	0.003	0.5	0	0.81	
rs1167827	7	75163169	A/G	P	-0.018	0.0073	-0.016	0.0061	-0.017	0.00034	0	0.77	
rs7804790	7	76568075	C/T	P	0.029	0.0099	0.014	0.0084	0.02	0.0016	30	0.23	
rs3930017	7	76720582	A/G	P	-0.0046	0.0074	0.0011	0.0061	-0.0012	0.79	0	0.55	
rs3779273	7	77828940	G/A	P	0.011	0.0069	0.01	0.0058	0.01	0.018	0</		

SNP	Chr	Pos	Allele	Type	M Eff	M SE	F Eff	F SE	Meta Eff	Meta P	Meta I ²	Meta Het.	P
rs17405819	8	76806584	T/C	P	0.015	0.0074	0.038	0.0062	0.028	2.1e-09	82	0.017	
rs1051920	8	81438420	C/T	P	0.016	0.0078	0.019	0.0065	0.018	0.00033	0	0.76	
rs733594	8	85077686	C/T	P	-0.03	0.0076	-0.0098	0.0063	-0.018	0.00024	75	0.045	
rs4366055	8	95507328	A/C	P	0.027	0.0076	0.0024	0.0064	0.013	0.01	84	0.013	
rs3134353	8	101947453	A/T	P	-0.012	0.007	-0.01	0.0058	-0.011	0.016	0	0.88	
rs3802177	8	118185025	G/A	P	-0.012	0.0074	0.0049	0.0062	-0.0019	0.69	66	0.084	
rs12352785	9	6956850	A/C	GG	0.0091	0.0077	0.031	0.0064	0.022	1e-05	78	0.031	
rs4740619	9	15634326	T/C	P	0.0055	0.0069	0.015	0.0058	0.011	0.012	12	0.29	
rs10811661	9	22134094	T/C	P	-0.0078	0.0088	0.014	0.0073	0.0049	0.39	72	0.06	
rs1934100	9	23234308	A/T	P	0.01	0.0076	0.004	0.0053	0.0066	0.17	0	0.52	
rs10811901	9	23356935	G/A	P	-0.0034	0.0069	-0.012	0.0058	-0.0084	0.059	0	0.35	
rs10968577	9	28415512	C/T	P	-0.038	0.0074	-0.021	0.0062	-0.028	2.6e-09	69	0.074	
rs11142387	9	72998332	A/C	P	0.011	0.0068	0.00024	0.0057	0.0046	0.29	30	0.23	
rs10868215	9	87234111	T/C	P	0.0048	0.007	0.0091	0.0059	0.0073	0.1	0	0.63	
rs1147199	9	87275895	A/G	P	4.8e-05	0.0085	-0.01	0.0071	-0.006	0.27	0	0.36	
rs12236219	9	97062981	C/T	P	0.014	0.013	0.022	0.011	0.019	0.028	0	0.66	
rs3932549	9	97073588	A/C	P	0.0097	0.0073	0.0038	0.0061	0.0062	0.19	0	0.49	
rs7855432	9	100760113	G/T	P	0.0085	0.0083	0.0011	0.0069	0.0041	0.44	0	0.53	
rs580809	9	101518442	C/T	P	-0.0019	0.0079	0.018	0.0066	0.0096	0.059	72	0.058	
rs7024334	9	109072075	T/G	P	0.014	0.008	0.0094	0.0067	0.011	0.027	0	0.65	
rs6477694	9	111932342	C/T	P	0.015	0.0071	0.015	0.0059	0.015	0.0012	0	0.98	
rs1928295	9	120378483	T/C	P	0.0054	0.0068	0.014	0.0057	0.011	0.015	0	0.32	
rs10760279	9	126105291	G/T	P	-0.013	0.0082	-0.019	0.0069	-0.017	0.0015	0	0.54	
rs1105223	9	126128211	T/C	P	0.014	0.0079	0.0097	0.0067	0.012	0.024	0	0.67	
rs5015933	9	128137418	T/C	P	0.0014	0.0069	0.013	0.0058	0.0082	0.064	40	0.2	
rs2235056	9	129377235	C/T	P	0.014	0.013	0.022	0.011	0.018	0.029	0	0.65	
rs10733682	9	129460914	A/G	P	0.018	0.0079	0.027	0.0066	0.024	3.2e-06	0	0.35	
rs2270204	9	131042734	T/G	P	-0.031	0.0082	-0.0075	0.0069	-0.017	0.0011	79	0.028	
rs2280843	9	131585069	A/G	P	0.003	0.0079	-0.00023	0.0066	0.0011	0.83	0	0.75	
rs11257655	10	12307894	C/T	P	0.0087	0.0082	0.015	0.0069	0.013	0.018	0	0.54	
rs1277723	10	18554623	G/A	P	-0.0063	0.0081	-0.018	0.0067	-0.013	0.012	13	0.28	
rs2274741	10	27303605	A/T	P	-0.0091	0.0092	-0.019	0.0077	-0.015	0.011	0	0.4	
rs118067556	10	63136165	C/T	GG	0.046	0.019	0.068	0.016	0.059	2.8e-06	0	0.39	
rs2163188	10	65314711	G/C	P	-0.019	0.0068	-0.016	0.0057	-0.017	8e-05	0	0.76	
rs3088142	10	76854564	C/T	P	-0.0065	0.007	-0.0076	0.0059	-0.0071	0.11	0	0.91	
rs7899106	10	87410904	A/G	P	-0.039	0.016	-0.039	0.014	-0.039	0.0002	0	0.98	
rs7923837	10	94481917	G/A	P	-0.016	0.0071	-0.013	0.006	-0.014	0.0023	0	0.76	
rs12569457	10	99096676	C/T	P	-0.0037	0.023	-0.0059	0.019	-0.005	0.73	0	0.94	
rs11189513	10	99969568	A/G	P	0.014	0.0073	0.028	0.0061	0.022	2.2e-06	53	0.14	
rs17094222	10	102395440	T/C	P	-0.032	0.0087	-0.021	0.0073	-0.025	5.9e-06	0	0.34	
rs2495707	10	102425949	A/G	P	0.025	0.0082	0.02	0.007	0.022	2.8e-05	0	0.7	
rs284860	10	104572963	T/C	P	-0.0051	0.0069	0.011	0.0058	0.0041	0.35	67	0.08	
rs11191580	10	104906211	T/C	P	-0.037	0.011	-0.036	0.0094	-0.036	4.9e-07	0	0.91	
rs7903146	10	114758349	C/T	P	0.024	0.0077	0.014	0.0065	0.018	0.00022	0.18	0.32	
rs10886017	10	118672531	C/A	P	-0.019	0.0078	-0.015	0.0065	-0.017	0.00073	0	0.73	
rs2257129	10	122898697	T/C	P	0.0067	0.015	0.0041	0.013	0.0051	0.6	0	0.9	
rs1568079	10	125251751	T/A	P	0.0066	0.0078	0.019	0.0065	0.014	0.0048	36	0.21	
rs1561589	10	126695673	G/A	P	-0.019	0.0074	-0.021	0.0062	-0.02	2.7e-05	0	0.89	
rs7126805	11	828916	G/A	P	-0.0072	0.01	-0.014	0.0089	-0.011	0.11	0	0.64	
rs2237892	11	2839751	C/T	P	-0.029	0.017	-0.028	0.014	-0.028	0.009	0	0.93	
rs10840100	11	8669437	A/G	P	-0.0041	0.0071	-0.014	0.0059	-0.01	0.027	15	0.28	
rs7938308	11	13320533	C/T	G	0.032	0.0077	0.027	0.0064	0.029	4.3e-09	0	0.57	
rs7928810	11	17372443	C/A	P	-0.016	0.0072	-0.002	0.006	-0.0077	0.094	55	0.14	
rs80317617	11	27362257	T/C	P	-0.033	0.015	-0.044	0.013	-0.039	5.7e-05	0	0.6	
rs6265	11	27679916	C/T	P	0.046	0.0085	0.038	0.0071	0.041	4.7e-14	0	0.49	
rs4517468	11	27688286	A/T	P	0.029	0.0072	0.045	0.0061	0.038	2.7e-16	64	0.094	
rs3026401	11	31807524	C/T	P	-0.014	0.008	-0.0024	0.0067	-0.007	0.17	16	0.28	
rs652722	11	31905534	C/T	P	0.0028	0.0076	0.0067	0.0064	0.0051	0.29	0	0.69	
rs4755726	11	43642130	T/G	P	0.028	0.0075	0.017	0.0063	0.021	9.3e-06	25	0.25	
rs10742752	11	45438374	T/C	GG	-0.011	0.007	-0.02	0.0059	-0.016	0.00032	3.8	0.31	
rs3816605	11	47857253	T/C	P	0.017	0.0068	0.021	0.0057	0.019	1e-05	0	0.69	
rs506338	11	64440920	T/C	P	-0.011	0.0073	-0.004	0.0062	-0.0068	0.15	0	0.48	
rs12273892	11	64480930	A/T	P	0.025	0.01	0.012	0.0084	0.017	0.0073	8.7	0.3	
rs11607976	11	69279111	C/T	P	0.012	0.0085	0.0011	0.0071	0.0055	0.31	0	0.33	
rs7123876	11	72444583	T/C	P	-0.0093	0.0081	-0.0091	0.0068	-0.0092	0.077	0	0.99	
rs10899469	11	78018313	T/C	P	0.0037	0.0088	0.0034	0.0074	0.0035	0.54	0	0.98	
rs1816537	11	112968651	A/C	P	-0.015	0.0069	-0.017	0.0058	-0.016	0.00028	0	0.87	
rs12286929	11	115022404	A/G	P	-0.024	0.007	-0.016	0.0058	-0.019	1.5e-05	0	0.4	
rs15818	11	118952173	A/G	P	0.0036	0.0071	-0.013	0.006	-0.006	0.19	67	0.08	
rs11611246	12	939480	G/T	P	-0.022	0.0083	-0.03	0.0069	-0.027	3.3e-07	0	0.44	
rs12828016	12	998365	G/T	P	0.011	0.0069	0.014	0.0058	0.013	0.004	0	0.69	
rs10772983	12	17141582	C/T	P	0.012	0.0068	0.013	0.0057	0.013	0.0034	0	0.92	
rs7970953	12	24075508	G/A	P	-0.016	0.0073	-0.012	0.0061	-0.014	0.0033	0	0.65	
rs11170468	12	39430048	A/C	GG	0.016	0.0084	0.0095	0.007	0.012	0.026	0	0.58	
rs1405552	12	41746673	G/A	P	0.015	0.0068	0.019	0.0057	0.017	0.0001	0	0.66	
rs11181001	12	41948196	A/G	P	0.023	0.007	0.011	0.0059	0.016	0.00036	43	0.18	
rs1126930	12	49399132	G/C	P	-0.013	0.021	-0.0096	0.017	-0.011	0.41	0	0.91	
rs7132908	12	50263148	G/A	P	-0.022	0.0072	-0.02	0.0061	-0.02	1.2e-05	0	0.84	
rs77511173	12	53883537	T/C	P	0.021	0.02	0.011	0.017	0.015	0.23	0	0.69	
rs1819844	12	68205604	A/G	GG	0.023	0.0088	0.025	0.0074	0.024	2e-05	0	0.91	
rs61754230	12	72179446	C/T	P	-0.015	0.037	-0.023	0.031	-0.02	0.4	0	0.85	
rs10777237	12	90643524	T/C	P	0.015	0.0075	0.0066	0.0063	0.01	0.035	0	0.38	
rs1966714	12	90671038	A/G	P	0.019	0.0083	-0.0085	0.0069	0.0026	0.63	84	0.012	
rs11105839	12	91237920	T/A	P	0.0026	0.007	0.019	0.0058	0.012	0.006	70	0.07	
rs2372716	12	99573426	C/T	GG	0.023	0.0086	0.017	0.0072	0.019	0.00051	0	0.59	
rs3184504	12	111884608	T/C	P	-0.01	0.0071	-0.023	0.0059	-0.018	0.0001	50	0.16	
rs2301712	12	112641377	T/G	P	0.032	0.016	-0.0018	0.013	0.012	0.25	63	0.1	
rs729062	12	113687859	A/G	P	-0.016	0.014	-0.0052	0.011	-0.0096	0.27	0	0.55	
rs1169081	12	122405912	G/T	P	0.0088	0.0074	0.013	0.0062	0.011	0.016	0	0.64	
rs7978353	12	122617989	A/G	P	-0.0035	0.0071	0.0099	0.006	0.0044	0.34	52	0.15	
rs11057405	12	122781897	G/A	P	0.024	0.014	0.027	0.011	0.026	0.0034	0	0.86	
rs4319547	12	123079035	A/G	P	-0.0096	0.0078	-0.013	0.0065	-0.011	0.024	0	0.77	
rs34149579	12	123345509	G/T	P	-0.0022	0.019	0.021	0.016	0.012	0.33	0	0.35	
rs11247009	12	132701184	G/A	P	-0.01								

SNP	Chr	Pos	Allele	Type	M Eff	M SE	F Eff	F SE	Meta Eff	Meta P	Meta I ²	Meta Het.	P
rs12895330	14	33305343	G/C	P	-0.019	0.0068	-0.029	0.0057	-0.025	1.1e-08	27	0.24	
rs7141420	14	79899454	C/T	P	-0.022	0.0067	-0.015	0.0056	-0.018	3.4e-05	0	0.47	
rs10150332	14	79936964	T/C	P	-0.024	0.0085	-0.031	0.0071	-0.028	2.9e-07	0	0.5	
rs3783890	14	93790276	T/C	P	0.025	0.0086	0.011	0.0072	0.017	0.0026	35	0.21	
rs729050	14	94109502	G/T	P	-0.025	0.0075	-0.022	0.0062	-0.023	1.4e-06	0	0.73	
rs7161194	14	101529005	A/G	GG	0.0095	0.0075	0.025	0.0063	0.019	9.9e-05	61	0.11	
rs1131877	14	103342049	T/C	P	-0.023	0.0078	-0.022	0.0065	-0.023	6.4e-06	0	0.89	
rs861539	14	104165753	G/A	P	0.0038	0.0073	0.013	0.0061	0.0095	0.042	1.3	0.31	
rs12440086	15	27038492	C/A	P	-0.0048	0.0068	-0.017	0.0057	-0.012	0.0071	44	0.18	
rs711906	15	40325691	C/T	P	0.024	0.014	-0.0089	0.011	0.0045	0.61	71	0.064	
rs1559677	15	47738063	A/G	P	-0.012	0.007	-0.011	0.0058	-0.012	0.0091	0	0.91	
rs3736485	15	51748610	A/G	P	0.0029	0.007	0.0029	0.0058	0.0029	0.52	0	1	
rs2593235	15	57541201	G/A	P	0.02	0.0069	0.0073	0.0058	0.013	0.0043	51	0.15	
rs17303831	15	62134332	T/C	P	0.035	0.017	0.039	0.014	0.038	0.00051	0	0.86	
rs12899850	15	66051299	C/T	GG	0.014	0.0088	0.028	0.0074	0.022	8.1e-05	26	0.24	
rs11071896	15	66821250	A/G	P	0.02	0.0078	0.0044	0.0066	0.011	0.031	58	0.12	
rs4776970	15	68080886	A/T	P	0.022	0.007	0.033	0.0058	0.029	1.5e-10	35	0.21	
rs2277598	15	73027478	T/C	P	-0.011	0.0071	-0.015	0.0059	-0.014	0.0028	0	0.66	
rs12593036	15	8108652	A/G	P	0.021	0.0075	0.011	0.0063	0.015	0.002	0	0.32	
rs7181659	15	95267483	A/G	P	0.028	0.0068	0.048	0.0057	0.014	0.0011	85	0.0095	
rs11865815	16	387867	C/T	P	0.0045	0.009	0.0091	0.0076	0.0072	0.21	0	0.7	
rs758747	16	3627358	C/T	P	-0.0091	0.0082	-0.01	0.0068	-0.0099	0.059	0	0.9	
rs1053874	16	37077747	G/A	P	-0.0041	0.0076	0.00016	0.0064	-0.0016	0.74	0	0.67	
rs879620	16	4015729	C/T	P	-0.033	0.0088	-0.021	0.0074	-0.026	3e-06	8.1	0.3	
rs1049205	16	4942099	C/T	P	0.002	0.007	0.017	0.0059	0.011	0.019	62	0.11	
rs9302817	16	6163936	T/G	P	0.023	0.0084	0.0038	0.0071	0.012	0.031	67	0.083	
rs1136001	16	15131974	G/T	P	0.015	0.0073	0.0063	0.0061	0.0098	0.035	0	0.37	
rs7190603	16	19928662	T/C	P	0.024	0.01	0.023	0.0086	0.023	0.00049	0	0.96	
rs11074446	16	20255123	T/C	P	0.025	0.0096	0.026	0.0081	0.026	3.6e-05	0	0.91	
rs9652589	16	20370816	C/T	P	0.0088	0.0069	0.025	0.0058	0.019	3e-05	70	0.066	
rs7195386	16	24578458	T/C	P	0.0096	0.0069	0.014	0.0057	0.012	0.005	0	0.61	
rs2008514	16	28825605	G/A	P	-0.034	0.0072	-0.022	0.006	-0.027	4e-09	46	0.18	
rs7204797	16	29968015	A/T	P	-0.016	0.0069	-0.023	0.0058	-0.02	9.3e-06	0	0.46	
rs9925964	16	31129895	A/G	P	0.0019	0.0074	0.03	0.0062	0.018	0.00011	88	0.0036	
rs2080454	16	49062590	G/A	P	0.0072	0.0071	0.014	0.006	0.011	0.015	0	0.47	
rs1564981	16	50986308	C/T	P	0.00014	0.0068	-0.0037	0.0057	-0.0021	0.63	0	0.66	
rs17795934	16	51926509	C/T	P	0.0056	0.0074	0.0045	0.0062	0.0049	0.3	0	0.91	
rs3213758	16	53639438	C/T	P	0.032	0.013	0.025	0.011	0.028	0.0012	0	0.71	
rs6499640	16	53769677	G/A	P	-0.028	0.007	-0.027	0.0058	-0.027	1.4e-09	0	0.93	
rs55872725	16	53809123	C/T	P	-0.078	0.007	-0.071	0.0059	-0.074	2.8e-60	0	0.41	
rs113191842	16	53817318	G/A	P	-0.077	0.013	-0.06	0.011	-0.067	8.7e-15	0	0.34	
rs7187961	16	53826034	T/C	P	-0.041	0.0091	-0.045	0.0075	-0.044	5.3e-14	0	0.71	
rs2307022	16	68381978	A/G	P	-0.0075	0.0073	0.0018	0.0061	-0.0021	0.66	0	0.33	
rs889398	16	69556715	C/T	P	0.0088	0.0071	0.024	0.0059	0.018	0.00011	61	0.11	
rs61747555	16	71885423	A/G	P	0.027	0.0087	0.017	0.0073	0.021	0.00018	0	0.38	
rs62051555	16	72830539	C/G	P	0.013	0.019	0.013	0.016	0.013	0.28	0	0.99	
rs756717	16	72996162	G/A	P	0.015	0.0071	0.021	0.0059	0.019	3.8e-05	0	0.51	
rs4788694	16	73070083	C/G	P	0.011	0.0071	0.0054	0.0059	0.0075	0.097	0	0.57	
rs455527	16	89644001	T/C	P	0.022	0.016	0.0089	0.013	0.014	0.17	0	0.55	
rs2281727	17	2117945	A/G	P	-0.0075	0.0071	0.0011	0.006	-0.0024	0.59	0	0.35	
rs1885987	17	2203025	T/G	P	0.0086	0.0071	-0.0057	0.0059	0.00015	0.97	58	0.12	
rs35400274	17	4803711	G/A	P	-0.021	0.01	-0.011	0.0084	-0.015	0.017	0	0.45	
rs3026101	17	5280440	T/C	P	-0.014	0.0073	-0.026	0.0061	-0.021	6.9e-06	36	0.21	
rs4925114	17	17711270	A/G	P	-0.0048	0.0075	0.01	0.0064	0.004	0.41	57	0.13	
rs203462	17	19812541	T/C	P	0.011	0.0071	0.00017	0.0059	0.0048	0.29	33	0.22	
rs4986044	17	21261560	C/T	P	0.0083	0.0088	0.011	0.0075	0.01	0.077	0	0.8	
rs17826219	17	29161845	G/A	P	-0.028	0.011	0.0016	0.009	-0.011	0.12	77	0.037	
rs12150665	17	34914787	T/C	P	0.011	0.007	0.027	0.0059	0.021	4.4e-06	70	0.067	
rs11658063	17	36103872	C/G	P	-0.0016	0.007	-0.00036	0.0059	-0.00085	0.85	0	0.9	
rs11652097	17	45316717	C/T	P	-0.018	0.007	-0.0092	0.0059	-0.013	0.004	2.6	0.31	
rs1808192	17	45794706	A/G	P	0.01	0.0078	0.025	0.0065	0.019	0.00017	52	0.15	
rs6504108	17	46292923	C/T	P	0.011	0.0075	0.012	0.0063	0.012	0.015	0	0.89	
rs7406910	17	46688256	T/C	P	-0.012	0.012	-0.0045	0.0097	-0.0074	0.32	0	0.64	
rs17631394	17	61646000	G/A	P	0.019	0.008	0.0016	0.0067	0.0088	0.087	64	0.096	
rs4790981	17	65921834	A/G	P	-0.015	0.0081	-0.028	0.0068	-0.023	1.5e-05	39	0.2	
rs312750	17	68343539	G/A	P	-0.0065	0.0068	-0.0049	0.0057	-0.0056	0.2	0	0.85	
rs3760128	17	73886888	A/G	P	-0.024	0.0073	-0.0089	0.0062	-0.015	0.0012	61	0.11	
rs4889891	17	77768654	C/A	P	0.0086	0.0083	0.004	0.007	0.0059	0.27	0	0.67	
rs12939549	17	78611724	A/G	P	0.024	0.0069	0.0092	0.0058	0.015	0.0005	64	0.094	
rs1788799	18	21124945	C/G	P	0.018	0.0074	0.023	0.0062	0.021	7.6e-06	0	0.56	
rs1805081	18	21140432	T/C	P	0.025	0.007	0.018	0.0059	0.021	3e-06	0	0.45	
rs11081818	18	31251088	G/A	GG	-0.015	0.0069	-0.026	0.0058	-0.021	1.8e-06	29	0.24	
rs9304204	18	36896003	A/G	P	-0.0044	0.0089	-0.0066	0.0074	-0.0057	0.32	0	0.84	
rs7239883	18	40147671	G/A	P	0.0099	0.0071	0.017	0.0059	0.014	0.0025	0	0.47	
rs1518142	18	40721490	G/A	P	0.0062	0.0069	0.021	0.0057	0.015	0.00053	65	0.089	
rs4129322	18	50605642	G/A	P	-0.012	0.011	0.015	0.0093	0.0038	0.59	70	0.07	
rs7243785	18	52475162	A/G	P	-0.028	0.008	-0.011	0.0066	-0.018	0.00047	63	0.1	
rs7243357	18	56883319	T/G	P	0.0022	0.009	-0.0018	0.0075	-0.0002	0.97	0	0.73	
rs591166	18	57841589	T/A	P	-0.017	0.007	-0.015	0.0058	-0.016	0.00033	0	0.89	
rs12969709	18	57859563	C/A	P	-0.031	0.0079	-0.054	0.0066	-0.044	1.3e-18	81	0.022	
rs9944545	18	57958244	C/T	P	-0.01	0.0077	-0.04	0.0064	-0.028	1.1e-08	89	0.0027	
rs17066842	18	58040624	G/A	P	0.045	0.017	0.067	0.014	0.058	1.4e-07	0	0.33	
rs12454712	18	60845884	T/C	P	-0.0033	0.0083	-0.021	0.007	-0.014	0.01	63	0.099	
rs17710386	18	63461201	T/C	P	-0.0077	0.0077	-0.0093	0.0065	-0.0086	0.081	0	0.87	
rs2396359	19	1819125	T/C	P	0.0038	0.012	0.0066	0.01	0.0054	0.48	0	0.86	
rs11672550	19	1937193	C/T	P	0.0064	0.0098	0.0051	0.0083	0.0057	0.37	0	0.92	
rs45465594	19	3813906	A/C	P	-0.023	0.043	0.035	0.038	0.01	0.73	2.2	0.31	
rs8108738	19	18255359	G/A	P	0.014	0.0075	0.0096	0.0062	0.011	0.019	0	0.68	
rs874628	19	18304700	A/G	P	-0.014	0.0089	-0.008	0.0075	-0.011	0.067	0	0.6	
rs17724992	19	18454825	A/G	P	0.023	0.0096	-0.007	0.0081	0.0055	0.37	82	0.017	
rs757318	19	18820308	C/A	P	0.019	0.0086	0.0012	0.0073	0.0085	0.13	59	0.12	
rs17751061	19	19413092	C/T	P	0.014	0.0098	0.029	0.0083	0.022	0.00037	23	0.25	
rs17513613	19	30286822	T/C	P	0.0013	0.0075	-0.018	0.0063	-0.01	0.034	75	0.044	
rs4805566	19</												

SNP	Chr	Pos	Allele	Type	M Eff	M SE	F Eff	F SE	Meta Eff	Meta P	Meta i^2	Meta Het. P
rs6050446	20	25195509	A/G	P	-0.064	0.022	-0.055	0.018	-0.058	2.5e-05	0	0.73
rs6142096	20	32686658	G/A	GG	-0.021	0.0068	-0.017	0.0057	-0.019	2.2e-05	0	0.71
rs6013029	20	36399580	G/T	P	-0.019	0.015	-0.016	0.013	-0.017	0.075	0	0.88
rs6091540	20	51087862	C/T	P	0.026	0.0075	0.033	0.0063	0.03	2.7e-10	0	0.48
rs2243930	20	54147462	G/A	P	-0.022	0.0081	-0.023	0.0068	-0.023	1.4e-05	0	0.98
rs11908421	20	54379667	T/C	P	-0.0007	0.0086	0.009	0.0072	0.0049	0.37	0	0.39
rs6089584	20	60564086	G/C	P	0.022	0.0072	-0.007	0.006	0.005	0.28	90	0.0018
rs9983113	21	40315316	G/T	P	0.01	0.0069	0.027	0.0058	0.02	8e-06	70	0.067
rs427943	21	46570896	A/C	P	-0.0058	0.0069	-0.0074	0.0058	-0.0068	0.13	0	0.86
rs17759796	22	22190163	C/A	GG	-0.03	0.01	-0.024	0.0084	-0.027	3.2e-05	0	0.65
rs4820408	22	40604945	T/G	P	0.021	0.007	0.018	0.0058	0.019	1.6e-05	0	0.79
rs5758651	22	42609148	T/C	P	0.018	0.0083	0.0038	0.0069	0.0096	0.072	42	0.19
rs56330886	22	50493427	T/G	P	0.0074	0.038	0.039	0.031	0.026	0.28	0	0.52
rs1379871	23	31854782	G/C	P	-0.015	0.0051	-0.011	0.006	-0.013	0.00055	0	0.56
rs6529684	23	53542107	A/G	P	-0.028	0.005	-0.021	0.0059	-0.025	3.1e-11	0	0.4
rs11539157	23	68381264	C/A	P	0.017	0.006	0.0048	0.0071	0.012	0.011	39	0.2
rs3121672	23	117916370	T/C	P	-0.033	0.0062	-0.018	0.0073	-0.026	2.2e-08	58	0.12
rs1190736	23	136113464	C/A	P	0.0031	0.0049	0.0089	0.0057	0.0056	0.14	0	0.44
rs5945324	23	152894551	G/C	P	-0.0068	0.008	0.0086	0.0093	-0.00024	0.97	37	0.21

Table S8. Age heterogeneity tests at novel and previously known loci. P, previously-identified, G, GERA-identified, GG, GERA+GIANT-identified.

SNP	Chr	Pos	Allele	Type	$\beta_{<50}$	SE $_{<50}$	$\beta_{>50}$	SE $_{>50}$	Meta β	Meta P	Meta I^2	Meta Het.	P
rs2803328	1	1874326	C/G	P	-0.0098	0.0099	-0.0042	0.005	-0.0053	0.23	0	0.62	
rs7535528	1	2444414	G/A	P	0.025	0.013	0.013	0.0066	0.015	0.009	0	0.41	
rs12711521	1	11090916	C/A	P	0.0024	0.012	-0.0013	0.0061	-0.0005	0.93	0	0.78	
rs3766160	1	15808872	G/A	P	0.038	0.011	0.007	0.0056	0.014	0.0068	84	0.011	
rs10799790	1	23418153	C/T	P	0.0071	0.012	0.012	0.0064	0.011	0.05	0	0.71	
rs2076463	1	27971092	A/G	P	0.024	0.021	-0.0067	0.013	0.0017	0.88	33	0.22	
rs2271928	1	32127953	G/A	P	0.0027	0.01	0.012	0.0052	0.0097	0.036	0	0.44	
rs2228552	1	32165495	G/T	P	-0.0074	0.012	-0.011	0.0062	-0.01	0.065	0	0.8	
rs2296172	1	39835817	A/G	P	-0.05	0.012	-0.025	0.0061	-0.03	2.2e-08	71	0.065	
rs1707322	1	46505147	A/G	P	-0.009	0.011	0.0021	0.0054	-0.00021	0.96	0	0.35	
rs977747	1	47684677	T/G	P	0.024	0.01	0.018	0.0051	0.02	2e-05	0	0.62	
rs11583200	1	50559820	C/T	P	0.018	0.01	0.022	0.0051	0.021	5.2e-06	0	0.75	
rs12140153	1	62579891	G/T	P	0.043	0.021	0.027	0.01	0.03	0.0012	0	0.48	
rs2481665	1	62594677	T/C	P	0.014	0.01	0.023	0.0052	0.021	6.6e-06	0	0.46	
rs11209943	1	72750500	A/G	P	-0.042	0.01	-0.03	0.0052	-0.033	2.5e-12	0	0.33	
rs12042908	1	74997762	A/G	P	0.038	0.01	0.011	0.0051	0.016	0.00031	83	0.016	
rs4130548	1	78463868	T/C	P	-0.025	0.011	-0.022	0.0054	-0.022	4.3e-06	0	0.78	
rs540742	1	78585086	T/C	P	0.0072	0.011	0.02	0.0059	0.017	0.0011	0	0.34	
rs11165643	1	96924097	C/T	P	-0.031	0.01	-0.0048	0.0051	-0.01	0.024	82	0.017	
rs1801265	1	98348885	G/A	P	-0.0061	0.012	0.0082	0.0061	0.0053	0.33	10	0.29	
rs11185092	1	107886278	A/G	P	-0.041	0.012	-0.014	0.0058	-0.02	0.00013	77	0.038	
rs62623713	1	110019439	A/G	P	-0.036	0.023	-0.014	0.011	-0.018	0.074	0	0.39	
rs17024393	1	110154688	T/C	P	-0.041	0.032	-0.018	0.016	-0.022	0.11	0	0.53	
rs197412	1	112308953	T/C	P	-0.0043	0.0099	-0.025	0.005	-0.02	5.4e-06	70	0.068	
rs10923724	1	119546842	C/T	P	0.027	0.0097	0.017	0.0049	0.019	1.6e-05	0	0.37	
rs4512652	1	151115690	G/C	P	0.016	0.011	0.012	0.0055	0.013	0.01	0	0.76	
rs2297792	1	156011444	T/C	P	-0.01	0.01	-0.0047	0.0052	-0.0058	0.21	0	0.65	
rs347313	1	162304276	A/G	P	-0.0014	0.0099	-0.0053	0.005	-0.0045	0.31	0	0.72	
rs10913118	1	175954755	A/C	P	-0.0097	0.011	-0.0083	0.0054	-0.0086	0.077	0	0.91	
rs574367	1	177873210	G/T	P	-0.073	0.012	-0.045	0.0063	-0.051	8.4e-20	74	0.05	
rs591120	1	177902753	G/C	P	-0.03	0.0098	-0.013	0.005	-0.016	0.00022	61	0.11	
rs491055	1	190308834	A/G	P	0.033	0.0099	0.018	0.005	0.022	1.7e-06	45	0.18	
rs1998710	1	190670884	C/T	P	-0.01	0.0096	-0.0019	0.0049	-0.0037	0.4	0	0.44	
rs10754220	1	197244290	G/A	P	0.036	0.011	0.017	0.0056	0.02	4.2e-05	56	0.13	
rs16849342	1	201754444	G/C	P	-0.016	0.024	-0.02	0.012	-0.02	0.064	0	0.87	
rs2820312	1	201869257	G/A	P	-0.038	0.011	-0.038	0.0054	-0.038	5.3e-15	0	0.99	
rs823114	1	205719532	G/A	P	0.018	0.0097	0.001	0.005	0.0044	0.32	56	0.13	
rs1704198	1	213910494	T/G	P	-0.0037	0.012	-0.0021	0.0058	-0.0024	0.65	0	0.9	
rs9786986	1	235656632	G/T	P	-0.027	0.013	-0.0028	0.0072	-0.0084	0.18	63	0.1	
rs1074657	1	243746634	T/C	GG	0.022	0.01	0.02	0.0054	0.021	1.6e-05	0	0.91	
rs62106258	2	417167	T/C	G	0.19	0.026	0.07	0.012	0.093	1.9e-17	95	1.3e-05	
rs13021737	2	632348	A/G	P	-0.07	0.013	-0.047	0.0066	-0.052	2.6e-18	60	0.11	
rs10929925	2	6155557	C/A	P	0.025	0.0097	0.0085	0.005	0.012	0.0074	54	0.14	
rs111612372	2	20433218	T/C	P	-0.02	0.011	0.0045	0.0053	-0.00045	0.92	77	0.039	
rs1550116	2	25022598	A/G	P	-0.033	0.014	-0.018	0.007	-0.021	0.00062	0	0.32	
rs713586	2	25158008	T/C	P	-0.042	0.0098	-0.033	0.005	-0.035	7.2e-15	0	0.4	
rs1561288	2	25369002	C/T	P	0.038	0.011	0.007	0.0058	0.014	0.0071	84	0.012	
rs1126666	2	26928811	G/A	P	-0.015	0.012	-0.013	0.006	-0.013	0.014	0	0.88	
rs3739081	2	26955621	A/G	P	0.022	0.0099	0.018	0.005	0.019	2.7e-05	0	0.73	
rs116612809	2	28301171	A/G	P	0.031	0.068	-0.068	0.039	-0.044	0.19	38	0.2	
rs6734118	2	37559355	C/A	P	-0.0079	0.011	-0.012	0.0058	-0.011	0.034	0	0.76	
rs77489951	2	38750287	C/T	P	-0.033	0.004	0.006	0.022	-0.0031	0.87	0	0.39	
rs1396141	2	41673745	C/T	GG	-0.0091	0.011	-0.022	0.0053	-0.02	3.7e-05	16	0.27	
rs7580766	2	42939351	A/G	GG	-0.015	0.0099	-0.018	0.005	-0.017	0.00011	0	0.78	
rs4596023	2	48955683	A/G	P	-0.013	0.011	-0.0018	0.0056	-0.0041	0.41	0	0.36	
rs10174398	2	51195601	T/C	P	0.02	0.011	0.0052	0.006	0.0085	0.11	29	0.24	
rs10208649	2	54161363	T/C	P	0.016	0.021	0.0099	0.01	0.011	0.23	0	0.79	
rs929641	2	58792377	A/G	P	0.01	0.0098	0.028	0.005	0.024	9e-08	61	0.11	
rs13011109	2	58857419	G/C	P	0.016	0.0099	0.023	0.0051	0.022	1.9e-06	0	0.55	
rs4671328	2	58935282	T/G	P	0.0053	0.0098	0.035	0.0049	0.029	4.1e-11	86	0.0066	
rs1016287	2	59305625	T/C	P	0.021	0.011	0.019	0.0055	0.019	9.3e-05	0	0.86	
rs11688816	2	63053048	G/A	P	0.0012	0.0098	0.012	0.005	0.0095	0.032	0	0.34	
rs17016673	2	79497779	C/G	P	-0.049	0.015	-0.021	0.0076	-0.027	4.8e-05	65	0.093	
rs4851287	2	100915772	A/G	P	0.015	0.011	0.0063	0.0053	0.0081	0.089	0	0.46	
rs1451533	2	105466005	G/A	P	0.00061	0.011	-0.014	0.0055	-0.011	0.027	30	0.23	
rs4988235	2	136608646	C/A	P	-0.025	0.01	-0.014	0.005	-0.016	0.00035	0	0.34	
rs12617004	2	142615136	C/C	P	0.014	0.012	-0.0054	0.0058	-0.0015	0.77	53	0.14	
rs2890652	2	142959931	T/C	P	-0.033	0.014	-0.017	0.0069	-0.02	0.001	11	0.29	
rs6710871	2	143960593	C/A	GG	-0.039	0.014	-0.021	0.007	-0.025	6.7e-05	29	0.23	
rs1460676	2	164567689	T/C	P	-0.011	0.013	-0.013	0.0065	-0.013	0.028	0	0.9	
rs3769885	2	165592390	G/A	P	-0.021	0.0097	-0.0038	0.0049	-0.0074	0.094	60	0.11	
rs2390669	2	169091942	A/C	P	-0.012	0.014	-0.0037	0.007	-0.0054	0.38	0	0.59	
rs6433857	2	181517996	C/T	P	-0.00057	0.01	0.0073	0.0051	0.0057	0.21	0	0.48	
rs11679338	2	181668895	C/T	P	-0.021	0.01	-0.021	0.0053	-0.021	6.1e-06	0	0.98	
rs17406900	2	203784202	A/G	P	-0.013	0.0099	-0.00035	0.005	-0.0028	0.52	17	0.27	
rs7569376	2	205385322	T/C	P	0.00026	0.011	0.011	0.0059	0.0089	0.087	0	0.39	
rs972540	2	207244783	A/G	P	-0.025	0.011	-0.014	0.0056	-0.017	0.001	0	0.41	
rs17203016	2	208255518	A/G	P	-0.0077	0.013	-0.018	0.0066	-0.016	0.0075	0	0.49	
rs10804189	2	211988980	A/G	P	0.019	0.011	0.013	0.0055	0.014	0.0032	0	0.63	
rs6435678	2	212710468	G/C	P	-0.00054	0.015	-0.0059	0.0077	-0.0048	0.49	0	0.76	
rs7599312	2	213413231	G/A	P	0.02	0.012	0.021	0.0059	0.021	5.4e-05	0	0.91	
rs492400	2	219349752	C/T	P	0.0098	0.01	0.01	0.0051	0.01	0.024	0	0.96	
rs4072096	2	227036603	A/C	P	-0.02	0.0096	-0.0093	0.0049	-0.011	0.0088	0	0.32	
rs10498218	2	228006255	A/G	P	0.16	0.13	-0.003	0.083	0.045	0.52	15	0.28	
rs7601000	2	242610773	T/A	P	-0.011	0.014	0.0046	0.0072	0.0015	0.82	0	0.33	
rs2574704	3	11655381	T/C	P	-0.012	0.01	-0.0072	0.0052	-0.0081	0.078	0	0.69	
rs1801282	3	12393125	C/G	P	-0.022	0.016	-0.023	0.0078	-0.023	0.001	0	0.94	
rs9845066	3	13433158	T/G	P	0.008	0.01	0.0061	0.0051	0.0065	0.15	0	0.87	
rs4857968	3	20714580	G/A	GG	0.0081	0.012	0.028	0.0057	0.024	3.4e-06	56	0.13	
rs6804842	3	25106437	A/G	P	-0.021	0.0099	-0.015	0.005	-0.016	0.00023	0	0.64	
rs8192473	3	42299399	C/T	P	0.0049	0.035	0.015	0.023	0.012	0.54	0	0.81	
rs754635	3	42305131	C/G	P	-0.041	0.014	-0.034	0.0074	-0.035	6.7e-08	0	0.64	
rs56084453	3	44762830	A/G	P	0.021	0.013	0.018	0.0063	0.019	0.0009	0	0.83	
rs3732530	3	47618953	C/A	P	0.0								

SNP	Chr	Pos	Allele	Type	$\beta_{<50}$	SE $_{<50}$	$\beta_{>50}$	SE $_{>50}$	Meta β	Meta P	Meta I^2	Meta Het.	P
rs2365389	3	61236462	C/T	P	0.022	0.01	0.021	0.0051	0.021	3.7e-06	0	0.9	
chr3:77646862:D	3	77646862	TG/T	G	0.022	0.01	0.029	0.0051	0.027	1.8e-09	0	0.55	
rs1840969	3	78830840	T/A	P	-0.012	0.0098	0.00065	0.005	-0.0019	0.68	18	0.27	
rs6792696	3	81874009	G/A	P	0.0083	0.01	-0.012	0.0052	-0.0078	0.091	68	0.077	
rs6794880	3	84451512	G/A	P	-0.023	0.014	-0.0082	0.0072	-0.011	0.081	0	0.37	
rs9852859	3	85842341	T/C	P	-0.042	0.013	-0.017	0.0063	-0.022	9.5e-05	67	0.082	
rs12495178	3	85886077	T/C	P	0.014	0.01	0.026	0.0051	0.024	1.9e-07	22	0.26	
rs7653652	3	88189341	T/C	P	-0.028	0.013	-0.0029	0.0068	-0.0083	0.17	66	0.088	
rs2173039	3	89142175	G/C	P	-0.00048	0.011	-0.0075	0.0057	-0.0061	0.23	0	0.58	
rs1436351	3	104617973	G/T	GG	-0.023	0.011	-0.019	0.0056	-0.02	6.2e-05	0	0.72	
rs7640424	3	107820063	C/T	P	-0.0037	0.012	0.011	0.0057	0.0085	0.095	28	0.24	
rs2868975	3	116935323	G/A	P	0.024	0.012	0.015	0.0064	0.017	0.0033	0	0.48	
rs1542829	3	130137471	G/A	P	0.0073	0.017	0.0018	0.0095	0.0031	0.71	0	0.78	
rs876424	3	131637676	T/G	P	-0.016	0.01	-0.014	0.0051	-0.015	0.0012	0	0.88	
rs7621025	3	136272246	T/C	P	-0.018	0.011	-0.0089	0.0057	-0.011	0.034	0	0.47	
rs1052618	3	136574501	A/G	P	-0.027	0.011	-0.01	0.0054	-0.014	0.0047	45	0.18	
rs1720825	3	138108083	A/G	P	0.011	0.013	0.021	0.0065	0.019	0.00094	0	0.48	
rs16851483	3	141275436	G/T	P	-0.0098	0.017	-0.012	0.0093	-0.012	0.16	0	0.9	
rs9438	3	154018887	G/C	P	-0.017	0.0098	-0.012	0.005	-0.013	0.0043	0	0.6	
rs2649734	3	157347640	G/A	P	0.00056	0.01	0.012	0.0051	0.0097	0.035	2	0.31	
rs13069244	3	180441172	G/A	P	-0.0064	0.02	-0.017	0.0099	-0.015	0.086	0	0.62	
rs11546878	3	183976103	C/T	P	0.014	0.014	0.0012	0.0068	0.0038	0.53	0	0.39	
rs2178403	3	184039666	A/G	P	0.022	0.012	0.015	0.0063	0.016	0.0034	0	0.61	
rs4686392	3	185524081	A/G	P	-0.0016	0.011	0.0045	0.0054	0.0032	0.5	0	0.61	
rs9816226	3	185834499	A/T	P	-0.011	0.013	-0.043	0.0066	-0.037	4.3e-10	80	0.026	
rs34811474	4	25408838	G/A	P	0.024	0.013	0.042	0.0062	0.039	4.7e-12	43	0.19	
rs16992647	4	36813105	C/T	P	-0.013	0.013	0.018	0.0066	0.011	0.061	78	0.032	
rs4833079	4	38654681	T/C	GG	0.027	0.011	0.021	0.0053	0.022	3.7e-06	0	0.56	
rs12641981	4	45179883	C/T	P	-0.034	0.0099	-0.026	0.005	-0.028	4.1e-10	0	0.48	
rs17001654	4	77129568	C/G	P	0.013	0.014	-0.0094	0.007	-0.0049	0.44	52	0.15	
rs13107325	4	103188709	C/T	P	-0.059	0.02	-0.055	0.0098	-0.056	3.7e-10	0	0.84	
rs4834272	4	113313986	T/C	P	-0.0072	0.01	-0.0068	0.0053	-0.0069	0.14	0	0.98	
rs3749591	4	120214030	T/G	P	-0.0097	0.01	-0.014	0.0053	-0.014	0.0041	0	0.68	
rs10019997	4	137048599	C/T	GG	-0.043	0.0099	-0.015	0.005	-0.021	4e-06	85	0.01	
rs11727676	4	145659064	T/C	P	0.039	0.018	0.013	0.0088	0.018	0.023	33	0.22	
rs112778462	5	2177693	G/A	P	0.19	0.14	-0.014	0.085	0.04	0.58	37	0.21	
rs4865796	5	53272664	C/A	P	0.025	0.011	0.012	0.0055	0.015	0.0035	3.9	0.31	
rs7720894	5	60733933	C/C	P	0.016	0.0098	0.0065	0.005	0.0085	0.058	0	0.39	
rs1503526	5	63020706	T/C	P	-0.02	0.01	-0.014	0.005	-0.015	0.00078	0	0.59	
rs1035491	5	63962177	A/G	P	0.014	0.01	-0.002	0.0053	0.0013	0.79	47	0.17	
rs3811987	5	74324548	G/A	P	0.01	0.011	0.014	0.0055	0.013	0.0064	0	0.75	
rs6893216	5	74442964	T/C	P	-0.00073	0.014	0.02	0.0075	0.015	0.021	37	0.21	
rs2307111	5	75003678	T/C	P	0.028	0.0098	0.029	0.005	0.029	1e-10	0	0.92	
rs6870983	5	87697533	C/T	P	0.032	0.012	0.021	0.0059	0.023	1.4e-05	0	0.4	
rs16903285	5	87978252	T/C	P	-0.019	0.013	-0.023	0.0068	-0.022	0.00021	0	0.78	
rs6234	5	95728974	G/C	P	-0.025	0.011	-0.013	0.0056	-0.015	0.0023	0	0.33	
rs261967	5	95850250	A/C	P	-0.025	0.0098	-0.016	0.005	-0.018	7.4e-05	0	0.41	
rs10062657	5	95867908	C/A	P	0.022	0.014	0.019	0.0075	0.02	0.0029	0	0.82	
rs30187	5	96124330	T/C	P	-0.0029	0.01	-0.017	0.0051	-0.014	0.0018	38	0.2	
rs40067	5	107439012	G/A	P	0.014	0.013	0.013	0.0065	0.013	0.023	0	0.93	
rs1045706	5	108714298	T/C	P	-0.022	0.01	-0.01	0.0051	-0.012	0.0064	13	0.28	
rs459552	5	112176756	T/A	P	0.0081	0.012	0.0035	0.006	0.0044	0.42	0	0.73	
rs4308481	5	122652106	C/T	P	0.024	0.01	0.019	0.0051	0.02	8.2e-06	0	0.66	
rs4357030	5	124316031	C/T	P	0.0017	0.011	-0.0074	0.0058	-0.0055	0.28	0	0.47	
rs4836133	5	124332103	C/A	P	-0.0047	0.0098	-0.012	0.005	-0.01	0.021	0	0.52	
rs329120	5	133861756	C/T	P	0.0075	0.0099	0.011	0.005	0.01	0.026	0	0.78	
rs13174863	5	139080745	A/G	P	-0.028	0.016	-0.018	0.0082	-0.02	0.0063	0	0.6	
rs815610	5	153517178	C/G	P	0.018	0.01	0.021	0.0051	0.02	9.2e-06	0	0.77	
rs7730898	5	170459675	G/A	GG	-0.024	0.011	-0.022	0.0057	-0.023	7.8e-06	0	0.87	
rs12513649	5	172472052	C/G	P	0.0011	0.038	-0.013	0.026	-0.0086	0.69	0	0.76	
rs3849724	5	173290977	G/T	P	0.0023	0.01	0.011	0.005	0.0092	0.042	0	0.45	
rs7715356	5	179129492	A/G	P	-0.001	0.011	0.0015	0.0054	0.001	0.83	0	0.83	
rs2228210	6	12122174	A/G	P	0.016	0.01	0.012	0.0053	0.013	0.0074	0	0.68	
rs2206734	6	20694884	C/T	P	0.014	0.012	0.014	0.0062	0.014	0.011	0	1	
rs183975233	6	32437160	T/A	P	-0.0063	0.01	-0.00054	0.0053	-0.0017	0.72	0	0.63	
rs943466	6	33731787	G/A	P	0.01	0.012	0.014	0.0059	0.013	0.011	0	0.74	
rs10947487	6	34189612	A/G	P	-0.011	0.019	0.0026	0.011	-0.00066	0.94	0	0.55	
rs206936	6	34302869	A/G	P	-0.015	0.011	-0.021	0.0059	-0.02	0.00014	0	0.6	
rs7757419	6	34439569	A/T	P	0.0021	0.013	-0.024	0.0065	-0.019	0.0013	70	0.07	
rs41312309	6	34498328	C/T	P	-0.0017	0.021	-0.013	0.01	-0.011	0.24	0	0.64	
rs6457796	6	34828553	T/C	P	-0.017	0.011	-0.016	0.0055	-0.016	0.0013	0	0.89	
rs2033529	6	40348653	A/G	P	-0.014	0.011	-0.019	0.0056	-0.018	0.00038	0	0.67	
rs78648104	6	50683009	T/C	P	0.029	0.017	0.022	0.0087	0.024	0.0023	0	0.72	
rs2206277	6	50798526	C/T	P	-0.033	0.012	-0.028	0.0063	-0.029	1.7e-07	0	0.71	
rs12199003	6	55196587	C/T	P	-0.01	0.0098	-0.0049	0.005	-0.0059	0.18	0	0.64	
rs148546399	6	64705610	G/A	P	0.09	0.13	-0.015	0.068	0.008	0.89	0	0.46	
rs513357	6	69558698	A/G	G	0.031	0.014	0.038	0.0077	0.036	6.8e-08	0	0.66	
rs947612	6	73738661	G/A	GG	0.0057	0.011	0.034	0.0057	0.028	2.9e-08	81	0.023	
rs17057164	6	97410536	T/C	P	-0.0048	0.013	0.0031	0.0067	0.0014	0.81	0	0.59	
rs4498364	6	97613773	C/T	P	0.02	0.011	0.0089	0.0054	0.011	0.021	0	0.36	
rs901630	6	98539519	C/T	GG	-0.00017	0.01	0.021	0.0051	0.017	0.00022	72	0.058	
rs9400239	6	108977663	T/C	P	-0.018	0.01	-0.024	0.0054	-0.022	2.8e-06	0	0.62	
rs2357760	6	120213880	G/A	P	-0.016	0.01	-0.0072	0.0053	-0.009	0.056	0	0.47	
rs6569648	6	130349119	C/T	GG	0.023	0.012	0.013	0.0061	0.015	0.0068	0	0.47	
rs13201877	6	137675541	A/G	P	0.013	0.015	-0.0085	0.0075	-0.0043	0.52	37	0.21	
rs2185027	6	153381622	A/C	P	-0.026	0.01	-0.012	0.0053	-0.015	0.0015	33	0.22	
rs487152	6	160774486	C/A	P	-0.036	0.0098	-0.017	0.005	-0.021	2.1e-06	66	0.089	
rs13191362	6	163033350	A/G	P	0.02	0.016	0.019	0.0079	0.019	0.0068	0	0.95	
rs9364687	6	163817911	G/T	GG	0.017	0.01	0.017	0.0051	0.017	0.00025	0	0.96	
rs1830074	7	6718674	T/C	P	-0.0069	0.011	-0.0076	0.0057	-0.0074	0.14	0	0.96	
rs10261878	7	25950545	A/C	P	0.0076	0.018	-0.023	0.0097	-0.016	0.061	52	0.15	
rs215607	7	32338337	G/A	P	0.014	0.012	0.024	0.0059	0.022	3.5e-05	0	0.46	
rs10269783	7	49616203	G/A	P	-0.0089	0.0099	-0.009	0.0051	-0.009	0.047	0	0.99	
rs11765748	7	50615616	T/A	P	0.0092	0.0097	0.013	0.005	0.012	0.0059	0	0.73	
rs694739													

SNP	Chr	Pos	Allele	Type	$\beta_{<50}$	SE _{<50}	$\beta_{>50}$	SE _{>50}	Meta β	Meta P	Meta I^2	Meta Het.	P
rs6990042	8	14173974	G/T	P	0.00026	0.0099	0.011	0.005	0.0088	0.05	0	0.34	
rs149352150	8	19736154	A/G	P	-0.022	0.2	-0.073	0.12	-0.059	0.58	0	0.83	
rs12156392	8	28140103	C/A	P	-0.021	0.01	-0.0094	0.0051	-0.012	0.0089	13	0.28	
rs10091344	8	34132075	G/A	P	0.016	0.01	0.0084	0.0053	0.01	0.031	0	0.49	
rs6471932	8	62078904	T/A	GG	0.017	0.016	0.027	0.0081	0.025	0.00053	0	0.55	
rs77636220	8	64552779	G/A	P	-0.018	0.024	-0.026	0.013	-0.024	0.038	0	0.76	
rs6994670	8	65191812	A/G	P	-0.011	0.02	-0.0031	0.011	-0.0049	0.62	0	0.74	
rs28857569	8	76697034	T/C	P	-0.044	0.012	-0.019	0.006	-0.024	5.9e-06	73	0.053	
rs17405819	8	76806584	T/C	P	0.052	0.011	0.024	0.0054	0.03	4.9e-10	82	0.019	
rs1051920	8	81438420	C/T	P	0.035	0.011	0.011	0.0057	0.016	0.0019	74	0.052	
rs733594	8	85077686	C/T	P	-0.0063	0.011	-0.018	0.0055	-0.016	0.0012	0	0.32	
rs4366055	8	95507328	A/C	P	0.0033	0.011	0.013	0.0056	0.011	0.031	0	0.43	
rs3134353	8	101947453	A/T	P	-0.0083	0.0099	-0.0092	0.0051	-0.009	0.048	0	0.94	
rs3802177	8	118185025	G/A	P	0.0019	0.011	-0.0013	0.0054	-0.00067	0.89	0	0.78	
rs12352785	9	6956850	A/C	GG	0.037	0.011	0.019	0.0055	0.022	8.9e-06	52	0.15	
rs4740619	9	15634326	T/C	P	-0.0019	0.0099	0.015	0.005	0.011	0.011	56	0.13	
rs10811661	9	22134094	T/C	P	0.013	0.012	0.0029	0.0064	0.0051	0.37	0	0.47	
rs1934100	9	23234308	A/T	P	-0.003	0.011	0.0044	0.0055	0.0029	0.56	0	0.54	
rs10811901	9	23356935	G/A	P	-0.0071	0.01	-0.0084	0.005	-0.0082	0.069	0	0.91	
rs10968577	9	28415512	C/T	P	-0.023	0.011	-0.026	0.0054	-0.026	9e-08	0	0.8	
rs11142387	9	72998332	A/C	P	-0.0027	0.0098	0.0042	0.005	0.0028	0.53	0	0.53	
rs10868215	9	87234111	T/C	P	0.0019	0.01	0.012	0.0051	0.0097	0.034	0	0.38	
rs1147199	9	87275895	A/G	P	-0.02	0.012	-0.0044	0.0062	-0.0077	0.16	24	0.25	
rs80068415	9	92093127	T/C	P	0.12	0.28	0.22	0.15	0.2	0.14	0	0.77	
rs12236219	9	97062981	C/T	P	-0.016	0.017	0.027	0.0099	0.016	0.061	79	0.028	
rs3932549	9	97073588	A/C	P	0.0038	0.01	0.0072	0.0053	0.0065	0.17	0	0.77	
rs7855432	9	100760113	G/T	P	0.011	0.012	0.00017	0.006	0.0024	0.65	0	0.41	
rs580809	9	101518442	C/T	P	0.013	0.011	0.011	0.0058	0.012	0.024	0	0.9	
rs7024334	9	109072075	T/G	P	0.018	0.011	0.0067	0.0059	0.0092	0.075	0	0.36	
rs6477694	9	111932342	C/T	P	0.015	0.01	0.012	0.0051	0.013	0.0045	0	0.8	
rs1928295	9	120378483	T/C	P	0.031	0.0097	0.0062	0.005	0.011	0.011	80	0.025	
rs10760279	9	126105291	G/T	P	-0.014	0.012	-0.018	0.006	-0.017	0.0013	0	0.77	
rs1105223	9	126128211	T/C	P	-0.0042	0.011	0.013	0.0058	0.0094	0.068	47	0.17	
rs5015933	9	128137418	T/C	P	0.014	0.0098	0.0088	0.005	0.0098	0.029	0	0.66	
rs2235056	9	129377235	C/T	P	0.013	0.017	0.027	0.0098	0.024	0.0058	0	0.48	
rs10733682	9	129460914	A/G	P	0.022	0.011	0.021	0.0057	0.021	3.2e-05	0	0.91	
rs2270204	9	131042734	T/G	P	-0.019	0.012	-0.012	0.006	-0.014	0.011	0	0.58	
rs2280843	9	131585069	A/G	P	-0.015	0.011	0.0039	0.0057	6.2e-05	0.99	55	0.14	
rs12253976	10	3835732	T/G	P	0.0019	0.086	-0.022	0.049	-0.016	0.7	0	0.81	
rs11257655	10	12307894	C/T	P	0.012	0.012	0.016	0.0061	0.015	0.005	0	0.75	
rs1277723	10	18554623	G/A	P	-0.017	0.011	-0.01	0.0059	-0.012	0.026	0	0.63	
rs2274741	10	27303605	A/T	P	-0.015	0.013	-0.015	0.0068	-0.015	0.011	0	0.99	
rs118067556	10	63136165	C/T	GG	0.045	0.029	0.054	0.014	0.052	4.1e-05	0	0.79	
rs2163188	10	65314711	G/C	P	-0.021	0.0097	-0.014	0.005	-0.015	0.00057	0	0.53	
rs80117551	10	69834828	C/T	P	-0.013	0.027	0.033	0.018	0.018	0.23	52	0.15	
rs3088142	10	76854564	C/T	P	-0.006	0.01	-0.0056	0.0051	-0.0057	0.21	0	0.97	
rs7899106	10	87410904	A/G	P	-0.046	0.023	-0.037	0.012	-0.038	0.00026	0	0.71	
rs7923837	10	94481917	G/A	P	-0.024	0.01	-0.011	0.0052	-0.014	0.0029	22	0.26	
rs12569457	10	99096676	C/T	P	0.022	0.031	-0.0078	0.017	-0.00091	0.95	0	0.4	
rs11189513	10	99969568	A/G	P	0.026	0.01	0.022	0.0053	0.023	1.6e-06	0	0.73	
rs17094222	10	102395440	T/C	P	-0.028	0.012	-0.022	0.0064	-0.024	3.1e-05	0	0.67	
rs2495707	10	102425949	A/G	P	0.024	0.012	0.021	0.0061	0.022	4.9e-05	0	0.83	
rs284860	10	104572963	T/C	P	0.0058	0.0099	0.0071	0.0051	0.0069	0.13	0	0.91	
rs11191580	10	104906211	T/C	P	-0.05	0.015	-0.03	0.0083	-0.035	2.2e-06	22	0.26	
rs7903146	10	114758349	C/T	P	0.0069	0.011	0.019	0.0056	0.017	0.0009	0	0.34	
rs10886017	10	118672531	C/A	P	-0.0095	0.011	-0.018	0.0057	-0.017	0.001	0	0.47	
rs2257129	10	122898697	T/C	P	0.0077	0.019	0.0012	0.012	0.0029	0.77	0	0.77	
rs1568079	10	125251751	T/A	P	0.023	0.011	0.013	0.0057	0.015	0.003	0	0.43	
rs1561589	10	126695673	G/A	P	-0.014	0.011	-0.022	0.0054	-0.02	3.3e-05	0	0.52	
rs7126805	11	828916	G/A	P	-0.00071	0.015	-0.015	0.0077	-0.012	0.073	0	0.38	
rs2237892	11	2839751	C/T	P	-0.024	0.022	-0.024	0.013	-0.024	0.029	0	0.99	
rs10840100	11	8669437	A/G	P	-0.009	0.01	-0.012	0.0052	-0.011	0.013	0	0.79	
rs7938308	11	13320533	C/T	G	0.037	0.011	0.026	0.0056	0.028	2.1e-08	0	0.36	
rs7928810	11	17372443	C/A	P	-0.0011	0.01	-0.0038	0.0052	-0.0033	0.48	0	0.81	
rs80317617	11	27362257	T/C	P	-0.0014	0.023	-0.044	0.011	-0.036	0.0003	65	0.092	
rs6265	11	27679916	C/T	P	0.03	0.012	0.042	0.0062	0.039	1.6e-12	0	0.39	
rs4517468	11	27688286	A/T	P	0.045	0.01	0.037	0.0053	0.038	3.8e-16	0	0.45	
rs3026401	11	31807524	C/T	P	-0.021	0.011	-0.0048	0.0059	-0.0083	0.11	40	0.2	
rs652722	11	31905534	C/T	P	0.0091	0.011	0.0046	0.0056	0.0055	0.26	0	0.71	
rs4755726	11	43642130	T/G	P	0.014	0.011	0.02	0.0055	0.019	0.00012	0	0.64	
rs10742752	11	45438374	T/C	GG	-0.013	0.01	-0.018	0.0051	-0.017	0.00015	0	0.65	
rs3816605	11	47857253	T/C	P	0.032	0.0098	0.017	0.005	0.02	4.1e-06	47	0.17	
rs506338	11	64440920	T/C	P	0.011	0.01	-0.0068	0.0054	-0.003	0.53	57	0.13	
rs12273892	11	64480930	A/T	P	-0.017	0.014	0.023	0.0073	0.015	0.022	84	0.012	
rs11607976	11	69279111	C/T	P	0.017	0.012	0.0048	0.0062	0.0072	0.19	0	0.39	
rs7123876	11	72444583	T/C	P	-0.019	0.012	-0.0061	0.0059	-0.0088	0.094	3.6	0.31	
rs10899469	11	78018313	T/C	P	-0.00041	0.012	0.0073	0.0065	0.0057	0.32	0	0.58	
rs1816537	11	112968651	A/C	P	-0.033	0.01	-0.012	0.0051	-0.016	0.00031	70	0.066	
rs12286929	11	115022404	A/G	P	-0.0077	0.01	-0.02	0.0051	-0.017	0.00016	11	0.29	
rs15818	11	118952173	A/G	P	-0.022	0.01	-0.0023	0.0052	-0.0064	0.16	68	0.079	
rs11611246	12	939480	G/T	P	-0.023	0.012	-0.026	0.006	-0.025	2.9e-06	0	0.86	
rs12828016	12	998365	G/T	P	0.026	0.01	0.0089	0.0051	0.012	0.0056	60	0.11	
rs10772983	12	17141582	C/T	P	0.015	0.0098	0.01	0.0049	0.011	0.012	0	0.64	
rs7970953	12	24075508	G/A	P	-0.0018	0.01	-0.014	0.0053	-0.011	0.016	8.8	0.29	
rs80234489	12	31441179	A/C	P	0.016	0.036	0.03	0.024	0.026	0.19	0	0.75	
rs11170468	12	39430048	A/C	GG	0.014	0.012	0.012	0.0061	0.012	0.025	0	0.87	
rs1405552	12	41746673	G/A	P	0.024	0.0098	0.014	0.005	0.016	0.0004	0	0.36	
rs11181001	12	41948196	A/G	P	0.0089	0.01	0.016	0.0051	0.015	0.0014	0	0.53	
rs1126930	12	49399132	G/C	P	0.0057	0.03	-0.022	0.015	-0.016	0.22	0	0.42	
rs7132908	12	50263148	G/A	P	-0.035	0.01	-0.021	0.0053	-0.024	3.9e-07	35	0.22	
rs77511173	12	53883537	T/C	P	0.023	0.028	0.013	0.014	0.015	0.24	0	0.74	
rs1819844	12	68205604	A/G	GG	0.017	0.012	0.027	0.0064	0.025	1.3e-05	0	0.45	
rs61754230	12	72179446	C/T	P	0.018	0.055	-0.016	0.026	-0.0096	0.69	0	0.58	
rs10777237	12	90643524	T/C	P	0.022	0.011	0.0081	0.0055	0.011	0.024	29		

SNP	Chr	Pos	Allele	Type	$\beta_{<50}$	SE $_{<50}$	$\beta_{>50}$	SE $_{>50}$	Meta β	Meta P	Meta I^2	Meta Het.	P
rs11247009	12	132701184	G/A	P	-0.02	0.016	0.002	0.0087	-0.0028	0.72	29	0.24	
rs9581854	13	28017782	C/T	P	-0.02	0.013	-0.019	0.0065	-0.019	0.0013	0	0.94	
rs1933437	13	28624294	G/A	P	0.022	0.01	0.0072	0.0051	0.01	0.024	41	0.19	
rs9595908	13	33184288	T/C	GG	0.012	0.01	0.019	0.0052	0.018	0.00012	0	0.54	
rs4477562	13	54104968	C/T	P	-0.034	0.014	-0.03	0.0072	-0.031	1.1e-06	0	0.81	
rs9563576	13	58670147	C/T	GG	0.016	0.013	0.035	0.0065	0.031	5.3e-08	48	0.17	
rs2321882	13	59451989	G/C	P	-0.053	0.012	-0.028	0.0061	-0.033	1e-09	72	0.061	
rs9540493	13	66205704	A/G	P	0.03	0.0097	0.014	0.005	0.017	0.00012	55	0.14	
rs1441264	13	79580919	G/A	P	-0.035	0.01	-0.017	0.0051	-0.021	5.6e-06	60	0.11	
rs9634489	13	97049004	A/G	P	-0.023	0.0097	-0.017	0.0049	-0.018	3.4e-05	0	0.6	
rs10132280	14	25928179	C/A	P	0.012	0.011	0.02	0.0056	0.019	0.00019	0	0.49	
rs974471	14	29685328	G/A	P	-0.035	0.011	-0.014	0.0058	-0.019	0.00026	63	0.099	
rs12885454	14	29736838	C/A	P	0.032	0.01	0.015	0.0053	0.019	6.9e-05	52	0.15	
rs11847697	14	30515112	C/T	P	-0.043	0.023	-0.025	0.012	-0.028	0.0059	0	0.48	
rs12895330	14	33305343	G/C	P	-0.045	0.0098	-0.016	0.005	-0.022	5.8e-07	86	0.0072	
rs75766425	14	52511911	G/C	P	-0.069	0.044	0.0078	0.03	-0.016	0.51	52	0.15	
rs7141420	14	79899454	C/T	P	-0.012	0.0096	-0.017	0.0049	-0.018	0.00023	0	0.61	
rs10150332	14	79936964	T/C	P	-0.044	0.012	-0.024	0.0062	-0.028	5.5e-07	54	0.14	
rs3783890	14	93790276	T/C	P	0.016	0.012	0.015	0.0063	0.015	0.0056	0	0.98	
rs729050	14	94109502	G/T	P	-0.011	0.011	-0.024	0.0054	-0.021	1.3e-05	19	0.27	
rs7161194	14	101529005	A/G	GG	0.0091	0.011	0.022	0.0055	0.02	6.1e-05	16	0.27	
rs1131877	14	103342049	T/C	P	-0.012	0.011	-0.024	0.0057	-0.021	2.6e-05	0	0.33	
rs861539	14	104165753	C/A	P	0.021	0.011	0.0081	0.0053	0.011	0.025	13	0.28	
rs12440086	15	27038492	C/A	P	-0.023	0.0098	-0.011	0.005	-0.013	0.0028	15	0.28	
rs149913955	15	39654281	C/A	P	-0.1	0.15	0.041	0.067	0.017	0.78	0	0.39	
rs711906	15	40325691	C/T	P	-0.017	0.017	0.0085	0.01	0.0017	0.84	37	0.21	
rs1559677	15	47738063	A/G	P	-0.0007	0.0099	-0.013	0.0051	-0.011	0.019	21	0.26	
rs3736485	15	51748610	A/G	P	0.0016	0.01	0.0022	0.0051	0.002	0.65	0	0.96	
rs2593235	15	57541201	C/A	P	0.018	0.0098	0.0095	0.005	0.011	0.012	0	0.44	
rs17303831	15	62134332	T/C	P	0.042	0.022	0.028	0.013	0.032	0.0039	0	0.6	
rs12899850	15	66051299	C/T	GG	0.04	0.012	0.018	0.0064	0.023	5.9e-05	57	0.13	
rs11071896	15	66821250	A/G	P	0.016	0.011	0.0051	0.0057	0.0072	0.16	0	0.41	
rs4776970	15	68080886	A/T	P	0.016	0.0099	0.033	0.0051	0.029	1.9e-10	56	0.13	
rs2277598	15	73027478	T/C	P	-0.018	0.01	-0.011	0.0052	-0.013	0.0058	0	0.57	
rs12593036	15	81058652	A/G	P	0.025	0.011	0.013	0.0055	0.016	0.0015	0	0.35	
rs7181659	15	95267483	A/G	P	0.01	0.0096	0.013	0.0049	0.012	0.0063	0	0.81	
rs11866815	16	387867	C/T	P	0.043	0.013	0.001	0.0066	0.0098	0.095	88	0.0039	
rs758747	16	3627358	C/T	P	-0.012	0.012	-0.0077	0.006	-0.0087	0.1	0	0.73	
rs1053874	16	3707747	G/A	P	-0.017	0.011	0.0026	0.0056	-0.0016	0.74	63	0.1	
rs879620	16	4015729	C/T	P	-0.025	0.012	-0.027	0.0065	-0.026	4.6e-06	0	0.9	
rs1049205	16	4942099	C/T	P	0.023	0.01	0.0089	0.0051	0.012	0.0091	39	0.2	
rs9302817	16	6163936	T/G	P	0.013	0.012	0.013	0.0062	0.013	0.019	0	0.99	
rs1136001	16	15131974	G/T	P	-0.0064	0.01	0.014	0.0053	0.0099	0.037	68	0.076	
rs7190603	16	19928662	T/C	P	0.01	0.015	0.025	0.0075	0.022	0.0009	0	0.38	
rs11074446	16	20255123	T/C	P	0.024	0.013	0.026	0.0071	0.025	5.2e-05	0	0.92	
rs9652589	16	20370816	C/T	P	0.022	0.01	0.021	0.005	0.021	2.1e-06	0	0.94	
rs7195386	16	24578458	T/C	P	0.011	0.0098	0.012	0.005	0.012	0.0081	0	0.95	
rs2008514	16	28825605	G/A	P	-0.019	0.01	-0.026	0.0052	-0.025	9.2e-08	0	0.5	
rs7204797	16	29968015	C/T	P	-0.017	0.0099	-0.022	0.0051	-0.021	4.3e-06	0	0.69	
rs9925964	16	31129895	A/G	P	0.017	0.011	0.02	0.0054	0.02	4.1e-05	0	0.77	
rs2080454	16	49062590	C/A	P	0.031	0.01	0.0057	0.0052	0.011	0.018	80	0.026	
rs1564981	16	50986308	G/A	P	-0.01	0.0098	0.0013	0.005	-0.0011	0.8	8.4	0.3	
rs17795934	16	51926509	C/T	P	-0.00056	0.011	0.006	0.0054	0.0046	0.34	0	0.58	
rs3213758	16	53639438	C/T	P	0.027	0.018	0.019	0.0099	0.021	0.015	0	0.72	
rs6499640	16	53769677	G/A	P	-0.043	0.0099	-0.022	0.0051	-0.026	4.7e-09	70	0.068	
rs55872725	16	53809123	C/T	P	-0.092	0.01	-0.07	0.0051	-0.075	3e-60	74	0.051	
rs113191842	16	53817318	G/A	P	-0.081	0.02	-0.065	0.0097	-0.068	4.4e-15	0	0.49	
rs7187961	16	53826034	T/C	P	-0.065	0.014	-0.038	0.0065	-0.043	1.5e-13	69	0.07	
rs2307022	16	68381978	A/G	P	0.0029	0.011	-0.003	0.0053	-0.0018	0.7	0	0.62	
rs889398	16	69556715	C/T	P	0.016	0.01	0.017	0.0051	0.017	0.00018	0	0.9	
rs61747555	16	71885423	A/G	P	0.022	0.012	0.017	0.0063	0.018	0.0013	0	0.71	
rs62051555	16	72830539	C/G	P	0.0095	0.028	0.012	0.014	0.011	0.36	0	0.95	
rs756717	16	72996162	G/A	P	0.022	0.01	0.017	0.0052	0.018	0.00012	0	0.63	
rs4788694	16	73070083	C/G	P	0.0082	0.01	0.0097	0.0051	0.0094	0.039	0	0.89	
rs455527	16	89644001	T/C	P	0.003	0.021	0.022	0.012	0.018	0.093	0	0.43	
rs2281727	17	2117945	A/G	P	-0.0052	0.01	0.0001	0.0052	-0.00098	0.83	0	0.64	
rs1885987	17	2203025	T/G	P	0.0086	0.01	-0.0027	0.0052	-0.00041	0.93	0	0.32	
rs35400274	17	4803711	G/A	P	-0.012	0.014	-0.015	0.0074	-0.014	0.029	0	0.85	
rs3026101	17	5280440	T/C	P	-0.032	0.01	-0.018	0.0053	-0.021	8.4e-06	32	0.22	
rs4925114	17	17711270	A/G	P	0.008	0.011	0.0011	0.0055	0.0025	0.61	0	0.57	
rs203462	17	19812541	T/C	P	0.0014	0.01	0.0043	0.0051	0.0037	0.42	0	0.8	
rs4986044	17	21261560	C/T	P	0.014	0.012	0.012	0.0065	0.013	0.028	0	0.88	
rs17826219	17	29161845	G/A	P	-0.012	0.015	-0.0083	0.0079	-0.0092	0.19	0	0.82	
rs12150665	17	34914787	T/C	P	0.039	0.01	0.016	0.0051	0.021	3.5e-06	75	0.045	
rs11658063	17	36103872	C/G	P	0.0016	0.01	-0.0017	0.0051	-0.001	0.83	0	0.77	
rs11652097	17	45316717	C/T	P	-0.02	0.01	-0.012	0.0051	-0.014	0.0023	0	0.49	
rs1808192	17	45794706	A/G	P	0.023	0.011	0.02	0.0057	0.02	5e-05	0	0.77	
rs6504108	17	46292923	C/T	P	0.013	0.011	0.011	0.0055	0.011	0.021	0	0.85	
rs7406910	17	46688256	T/C	P	-0.022	0.016	-0.0029	0.0085	-0.0071	0.35	12	0.29	
rs17631394	17	61646000	G/A	P	-0.013	0.012	0.014	0.0058	0.0085	0.1	75	0.046	
rs4790981	17	65921834	A/G	P	-0.034	0.011	-0.017	0.006	-0.021	7.7e-05	44	0.18	
rs312750	17	68343539	G/A	P	-0.0014	0.0098	-0.0088	0.005	-0.0073	0.1	0	0.5	
rs3760128	17	73886888	A/G	P	-0.011	0.011	-0.013	0.0054	-0.012	0.01	0	0.86	
rs4889891	17	77768654	C/A	P	0.0098	0.012	0.0073	0.0061	0.0078	0.15	0	0.85	
rs12939549	17	78611724	A/G	P	0.024	0.0099	0.012	0.005	0.014	0.0013	16	0.28	
rs1788799	18	21124945	C/G	P	0.033	0.011	0.017	0.0054	0.02	3.2e-05	49	0.16	
rs1805081	18	21140432	T/C	P	0.023	0.01	0.018	0.0051	0.019	3.3e-05	0	0.67	
rs11081818	18	31251088	G/A	GG	-0.024	0.0099	-0.021	0.005	-0.021	1.8e-06	0	0.75	
rs9304204	18	36896003	A/G	P	0.00095	0.013	-0.0096	0.0065	-0.0074	0.2	0	0.46	
rs7239883	18	40147671	G/A	P	0.017	0.01	0.015	0.0052	0.016	0.00065	0	0.85	
rs1518142	18	40721490	G/A	P	0.0098	0.0098	0.017	0.005	0.016	0.00039	0	0.49	
rs4129322	18	50605642	G/A	P	-0.0049	0.015	0.0091	0.0082	0.006	0.41	0	0.42	
rs7243785	18	52475162	A/G	P	-0.019	0.011	-0.015	0.0058	-0.016	0.0021	0	0.72	
rs7243357	18	56883319	T/G	P	0.00065	0.013	0.0026	0.00					

SNP	Chr	Pos	Allele	Type	$\beta_{<50}$	SE $_{<50}$	$\beta_{>50}$	SE $_{>50}$	Meta β	Meta P	Meta I^2	Meta Het. P
rs17751061	19	19413092	C/T	P	0.042	0.015	0.018	0.0071	0.022	0.00048	54	0.14
rs17513613	19	30286822	T/C	P	-0.005	0.011	-0.012	0.0054	-0.011	0.028	0	0.56
rs4805566	19	30918316	T/A	P	-0.011	0.01	-0.0028	0.0052	-0.0046	0.32	0	0.46
rs33439	19	30945171	C/T	P	-0.0079	0.0099	-0.0089	0.005	-0.0087	0.053	0	0.93
rs29943	19	34308210	T/C	P	-0.019	0.01	-0.0094	0.0053	-0.011	0.016	0	0.39
rs2075650	19	45395619	A/G	P	0.012	0.014	0.025	0.007	0.022	0.00039	0	0.4
rs11671664	19	46172278	G/A	P	0.0029	0.015	0.018	0.0082	0.014	0.047	0	0.39
rs2287019	19	46202172	C/T	P	0.032	0.014	0.021	0.007	0.023	0.0002	0	0.46
rs3810291	19	47569003	G/A	P	-0.017	0.011	-0.021	0.0057	-0.02	7.1e-05	0	0.78
rs4802349	19	47874510	G/T	P	0.0039	0.014	-0.0035	0.0076	-0.0018	0.79	0	0.64
rs2075803	19	51628529	A/G	P	-0.03	0.011	-0.0064	0.0056	-0.011	0.023	73	0.055
rs1884897	20	6612832	A/G	P	-0.019	0.01	-0.018	0.0052	-0.018	0.00013	0	0.88
rs175804	20	15832299	A/T	P	0.011	0.016	0.011	0.0079	0.011	0.12	0	0.99
rs16978956	20	18288165	A/G	P	-0.039	0.012	-0.0095	0.0059	-0.015	0.0035	80	0.025
rs34099160	20	18295730	C/T	P	-0.044	0.017	-0.012	0.009	-0.019	0.017	63	0.1
rs2076559	20	25187213	G/A	P	0.0048	0.01	-0.012	0.0053	-0.0081	0.086	49	0.16
rs6050446	20	25195509	A/G	P	-0.017	0.033	-0.065	0.015	-0.057	5.4e-05	42	0.19
rs6142096	20	32686658	G/A	GG	-0.033	0.0098	-0.013	0.005	-0.017	0.00011	68	0.077
rs6013029	20	36399580	G/T	P	4e-05	0.021	-0.027	0.011	-0.021	0.028	23	0.26
rs6091540	20	51087862	C/T	P	0.015	0.011	0.034	0.0055	0.03	1e-09	57	0.13
rs2243930	20	54147462	G/A	P	-0.0089	0.011	-0.024	0.0059	-0.021	6e-05	31	0.23
rs11908421	20	54379667	T/C	P	0.014	0.012	0.0066	0.0063	0.0081	0.15	0	0.6
rs6089584	20	60564086	C/C	P	-0.004	0.01	0.006	0.0053	0.0039	0.4	0	0.39
rs9983113	21	40315316	C/T	P	0.049	0.0099	0.014	0.005	0.021	3e-06	90	0.0013
rs427943	21	46570896	A/C	P	-0.031	0.0099	-0.0033	0.0051	-0.009	0.047	83	0.014
rs17759796	22	22190163	C/A	GG	-0.031	0.015	-0.02	0.0073	-0.022	0.0007	0	0.49
rs4820408	22	40604945	T/G	P	0.016	0.01	0.018	0.0051	0.018	9.3e-05	0	0.88
rs5758651	22	42609148	T/C	P	0.019	0.012	0.0029	0.006	0.0063	0.24	32	0.22
rs56330886	22	50493427	T/G	P	0.058	0.05	0.0089	0.028	0.02	0.4	0	0.39
rs1379871	23	31854782	C/C	P	-0.02	0.009	-0.0094	0.0044	-0.011	0.0035	15	0.28
rs6529684	23	53542107	A/G	P	-0.031	0.0088	-0.024	0.0043	-0.025	3.4e-11	0	0.51
rs11539157	23	68381264	C/A	P	0.023	0.011	0.012	0.0051	0.014	0.0035	0	0.33
rs3121672	23	117916370	T/C	P	-0.025	0.011	-0.025	0.0054	-0.025	1.8e-07	0	0.98
rs1190736	23	136113464	C/A	P	0.0063	0.0087	0.0053	0.0042	0.0055	0.15	0	0.91
rs5945324	23	152894551	G/C	P	-0.0098	0.013	0.0073	0.0069	0.0037	0.55	23	0.25

Table S10. BMI-associated variants annotation. Type is GERA-identified (G), or GERA+GIANT-identified (GG). GTEx eQTLs have the first two letters in each word for the tissue types. RegulomeDB scores - 1: Likely to affect binding + eQTL expression; 2: Likely to affect binding; 3: Less likely to affect binding. 4: Minimal binding evidence

chr3:77646862:D, 3:77646862, G
eQTL:
eQTL (r^2):
RegulomeDB Score: 6
RegulomeDB bound protein:

rs513357, 6:69558698, G
eQTL:
eQTL (r^2):
RegulomeDB Score: 7
RegulomeDB bound protein:

rs7938308, 11:13320533, G
eQTL: ARNTL(WhBl)
eQTL (r^2): ARNTL(WhBl)
RegulomeDB Score: 2c
RegulomeDB bound protein: CTCF, EP300, GATA2, GATA3, RAD21

rs1074657, 1:243746634, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 5
RegulomeDB bound protein:

rs1396141, 2:41673745, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 7
RegulomeDB bound protein:

rs7580766, 2:42939351, GG
eQTL: HAAO(BrNuabaga, NeTi, WhBl), OXER1(WhBl)
eQTL (r^2): FTOP1(BrCeHe), HAAO(BrNuabaga, NeTi, WhBl), OXER1(WhBl), COX7A2L(EsMu, SkNoSuExSu, SkSuExLole, Te)
RegulomeDB Score: 5
RegulomeDB bound protein: POLR2A

rs6710871, 2:143960593, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 6
RegulomeDB bound protein:

rs4857968, 3:20714580, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 5
RegulomeDB bound protein:

rs1436351, 3:104617973, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 7
RegulomeDB bound protein:

rs4833079, 4:38654681, GG
eQTL: RP11-617D20.1(ArTi, EsMu), AC021860.1(EsMu)
eQTL (r^2): RP11-617D20.1(ArTi, EsMu), AC021860.1(EsMu)
RegulomeDB Score: 5
RegulomeDB bound protein:

rs10019997, 4:137048599, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 7
RegulomeDB bound protein:

rs7730898, 5:170459675, GG
eQTL: RANBP17(EsMu, Li), CTC-455F18.3(Te)
eQTL (r^2): RANBP17(EsMu, Li, SkSuExLole, BrCabaga), CTC-455F18.3(Te, ArTi)
RegulomeDB Score: 5
RegulomeDB bound protein:

rs947612, 6:73738661, GG
eQTL:
eQTL (r^2):

RegulomeDB Score: 5
RegulomeDB bound protein:

rs901630, 6:98539519, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 5
RegulomeDB bound protein:

rs6569648, 6:130349119, GG
eQTL: L3MBTL3(AdSu, AdvOm, ArAo, ArTi, BrMaTi, CoSi, CoTr, EsMu, Li, Lu, NeTi, Pa, Pi, Pr, SkNoSuExSu, SkSuExLole, SmInTeIl, Sp, St, Te, Th, WhBl), RP11-73O6.3(BrMaTi, CoTr, Li, Lu, NeTi, SkSuExLole, SmInTeIl, Sp, Th, WhBl)
eQTL (r^2): L3MBTL3(AdSu, AdvOm, ArAo, ArTi, BrMaTi, CeEBly, CoTr, EsMu, HeLeVe, Li, Lu, NeTi, Pa, Pi, Pr, SkNoSuExSu, SkSuExLole, SmInTeIl, Sp, St, Te, Th, WhBl), RP11-73O6.3(AdSu, AdvOm, BrMaTi, CoTr, Li, Lu, NeTi, Pa, Pi, SkSuExLole, SmInTeIl, Sp, St, Th, WhBl)
RegulomeDB Score: 1f
RegulomeDB bound protein:

rs9364687, 6:163817911, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 4
RegulomeDB bound protein: POU5F1, RBBP5

rs6471932, 8:62078904, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 7
RegulomeDB bound protein:

rs12352785, 9:6956850, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 5
RegulomeDB bound protein:

rs118067556, 10:63136165, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 5
RegulomeDB bound protein: GATA6

rs10742752, 11:45438374, GG
eQTL: PRDM11(Th)
eQTL (r^2):
RegulomeDB Score: 6
RegulomeDB bound protein:

rs11170468, 12:39430048, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 4
RegulomeDB bound protein: TCF7L2, TRIM28

rs1819844, 12:68205604, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 5
RegulomeDB bound protein: MYC

rs2372716, 12:99573426, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 6
RegulomeDB bound protein:

rs9595908, 13:33184288, GG
eQTL: N4BP2L2(ArAo), SNORA16(SkSuExLole, Sp, WhBl)
eQTL (r^2): N4BP2L2(ArAo, EsMu), SNORA16(SkSuExLole, WhBl, Sp, BrCe, BrCeHe, Th), RP11-298P3.4(ArTi, SkSuExLole)
RegulomeDB Score: 1f
RegulomeDB bound protein:

rs9563576, 13:58670147, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 6
RegulomeDB bound protein:

rs7161194, 14:101529005, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 2b
RegulomeDB bound protein: JUN, POLR2A

rs12899850, 15:66051299, GG
eQTL: IGDCC4(BrCeHe, BrCe), DENND4A(CeTrfi), PTPLAD1(Te)
eQTL (r^2): IGDCC4(BrCeHe, BrCe, MuSk), DENND4A(CeTrfi, Te), PTPLAD1(Te)
RegulomeDB Score: 5
RegulomeDB bound protein: MAFF

rs11081818, 18:31251088, GG
eQTL:
eQTL (r^2):
RegulomeDB Score: 5
RegulomeDB bound protein:

rs6142096, 20:32686658, GG
eQTL: MAP1LC3A(ArAo, CoTr, Th), RP1-64K7.4(Lu), ASIP(NeTi)
eQTL (r^2): MAP1LC3A(CoTr, Th, ArAo), RP1-64K7.4(Lu), ASIP(NeTi)
RegulomeDB Score: 5
RegulomeDB bound protein:

rs17759796, 22:22190163, GG
eQTL: LL22NC03-86G7.1(AdSu, Lu, NeTi, Th), PPM1F(BrCeHe, BrCe), TOP3B(BrCeHe, BrCe)
eQTL (r^2): LL22NC03-86G7.1(AdSu, Lu, NeTi, Th, EsMu, SkSuExLole), PPM1F(BrCeHe, BrCe), TOP3B(BrCeHe, BrCe)
RegulomeDB Score: 7
RegulomeDB bound protein:

Table S11. BMI x age pairwise heritability interactions.

Group	h_g^2	P_g	h_{ge}^2	P_{ge}
<52 vs. 52-59	0.306 (0.253, 0.358)	3.8e-30	0.078 (0.008, 0.149)	0.029
<52 vs. 60-65	0.301 (0.249, 0.353)	1.4e-29	0.065 (-0.005, 0.135)	0.07
<52 vs. 66-72	0.254 (0.201, 0.308)	2e-20	0.102 (0.029, 0.174)	0.0062
<52 vs. ≥ 73	0.261 (0.210, 0.313)	2.2e-23	0.076 (0.007, 0.145)	0.031
52-59 vs. 60-65	0.300 (0.250, 0.350)	8.1e-32	0.014 (-0.052, 0.080)	0.68
52-59 vs. 66-72	0.283 (0.234, 0.332)	8.9e-30	0.017 (-0.046, 0.079)	0.6
52-59 vs. ≥ 73	0.257 (0.207, 0.306)	3e-24	0.041 (-0.026, 0.107)	0.23
60-65 vs. 66-72	0.278 (0.228, 0.327)	3.6e-28	0.007 (-0.057, 0.070)	0.83
60-65 vs. ≥ 73	0.229 (0.179, 0.278)	1.9e-19	0.055 (-0.012, 0.122)	0.11
66-72 vs. ≥ 73	0.277 (0.229, 0.325)	1.2e-29	0.000 (-0.060, 0.060)	1

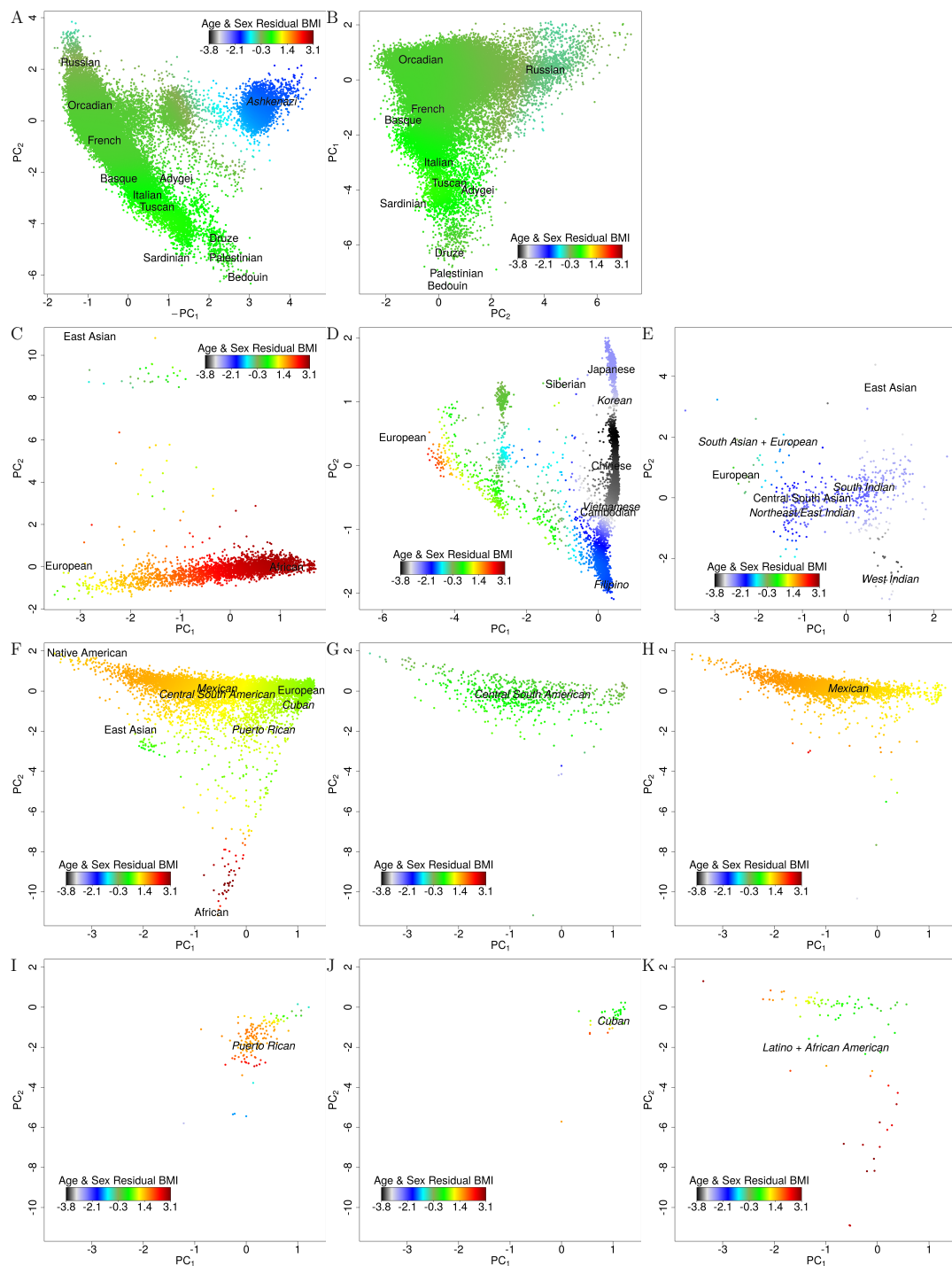
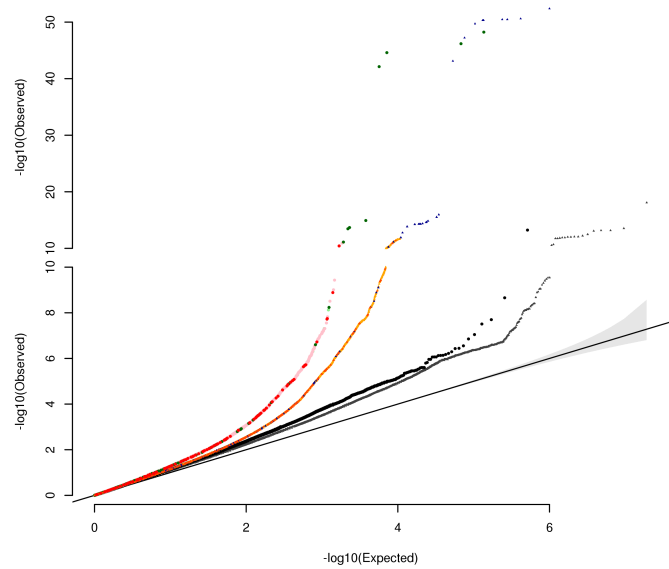
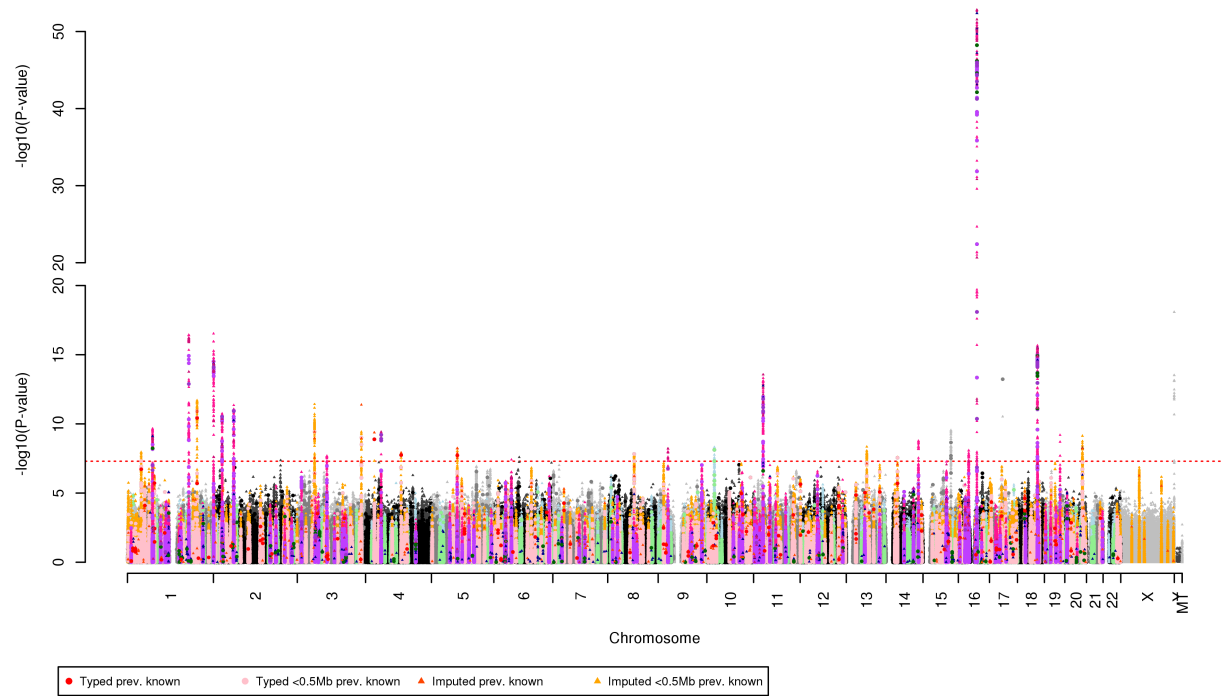
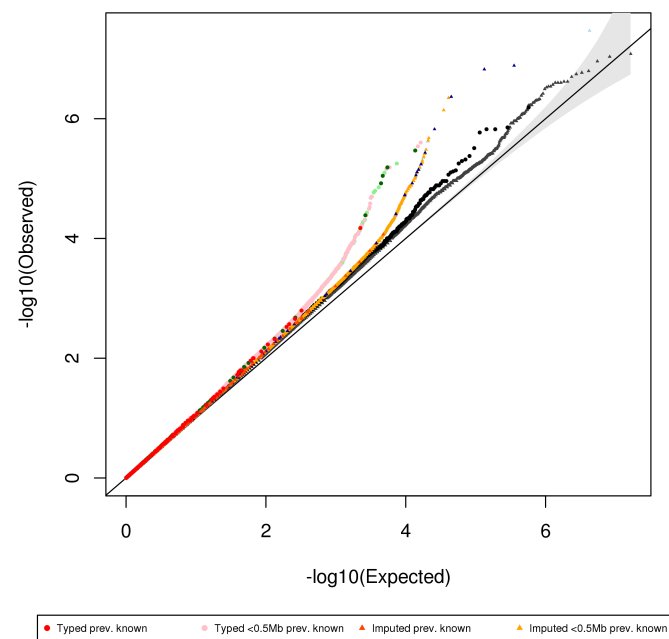
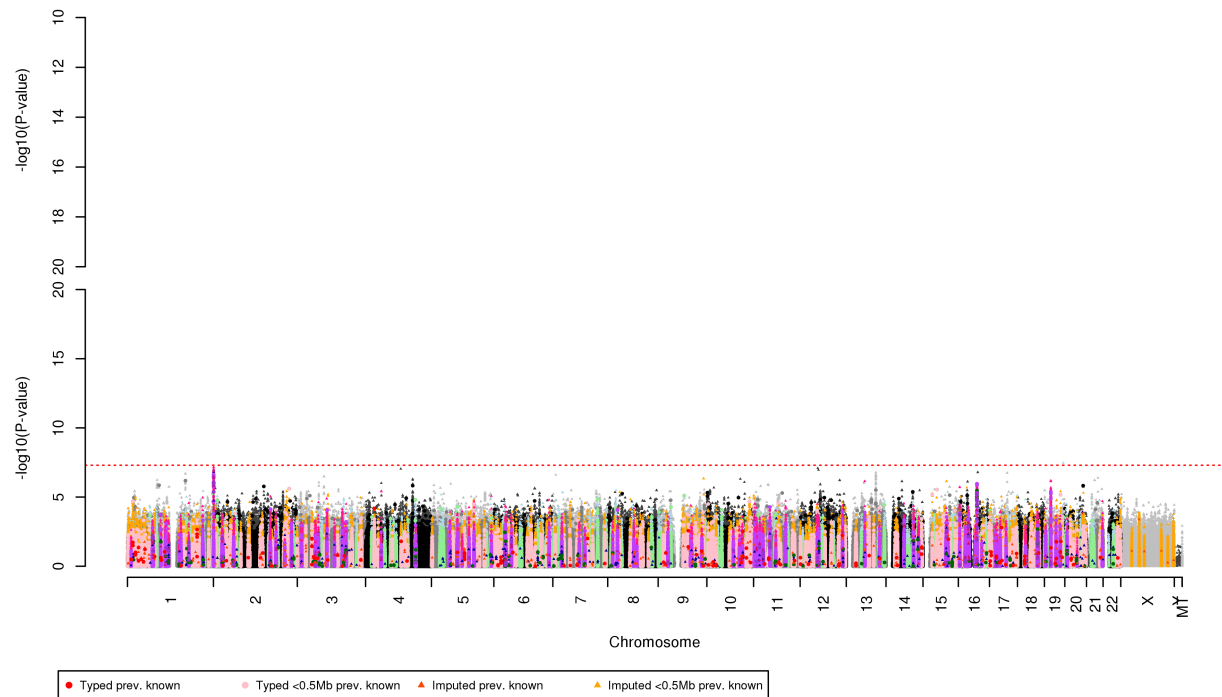


Figure S1. Age- and sex-adjusted BMI distribution in GERA ethnicity groups using the first calendar year measurement. The residual phenotype distribution was smoothed over the PCs (within the individuals in each respective figure), which were divided by their standard deviation for interpretability (see Methods). Human Genome Diversity Project populations are in a plain font, and GERA populations are in an italics font. (A) Non-Hispanic Whites including individuals with Ashkenazi ancestry (n=81,377); (B) Non-Hispanic Whites excluding individuals with Ashkenazi ancestry (n=76,088); (C) African Americans (n=3,069); (D) East Asians excluding Indo Fijians (n=7,235); (E) South Asians (n=459); (F) Latinos (n=8,322); (G) Latinos - Central South American (n=612); (H) Latinos - Mexican (n=3,048); (I) Latinos - Puerto Rican (n=148); (J) Latinos - Cuban (n=40); (K) Latinos - reporting Latino and African American (n=112).

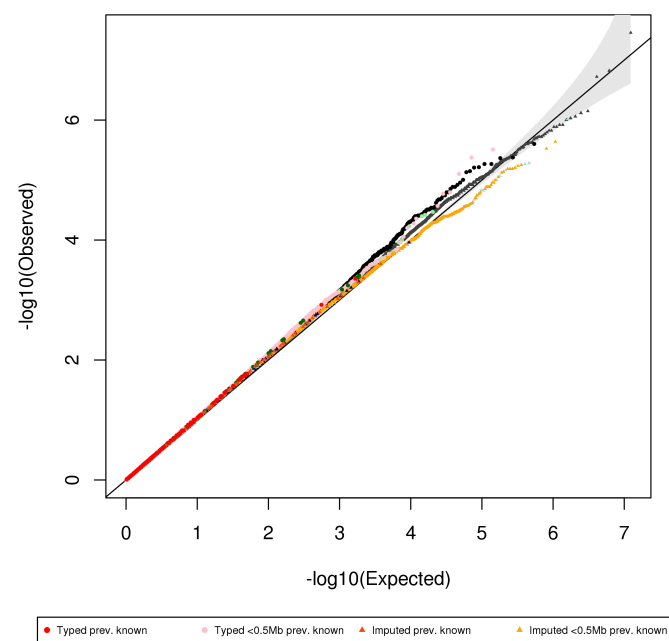
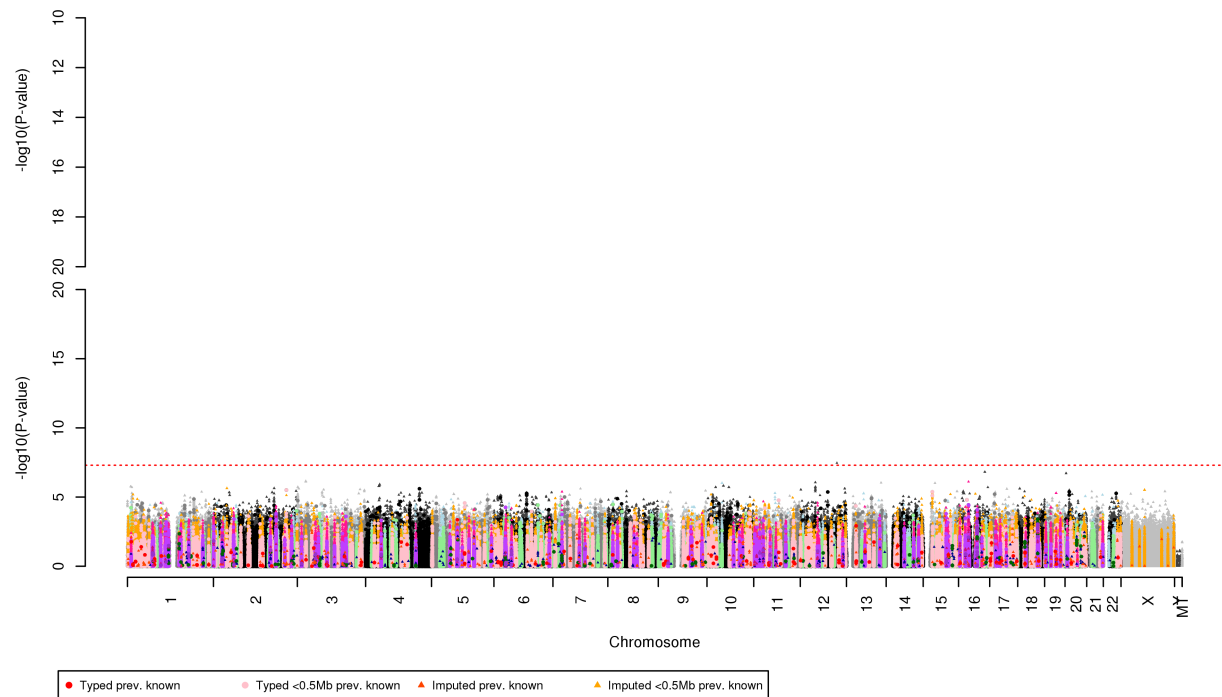
A



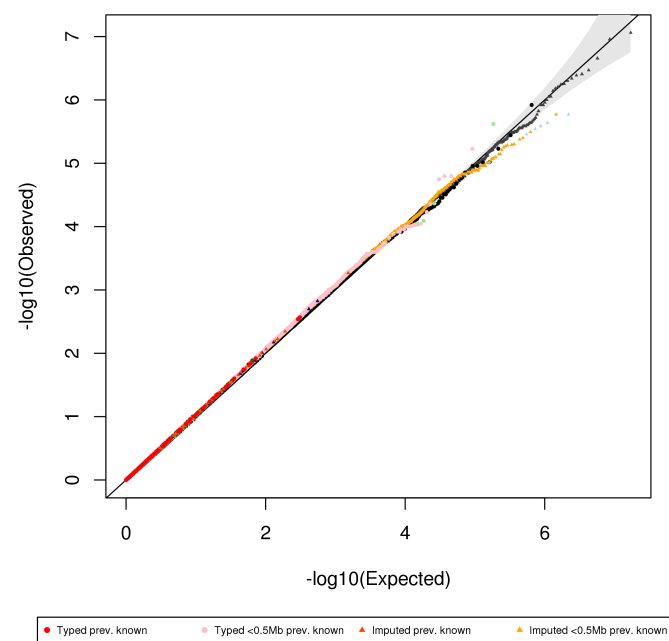
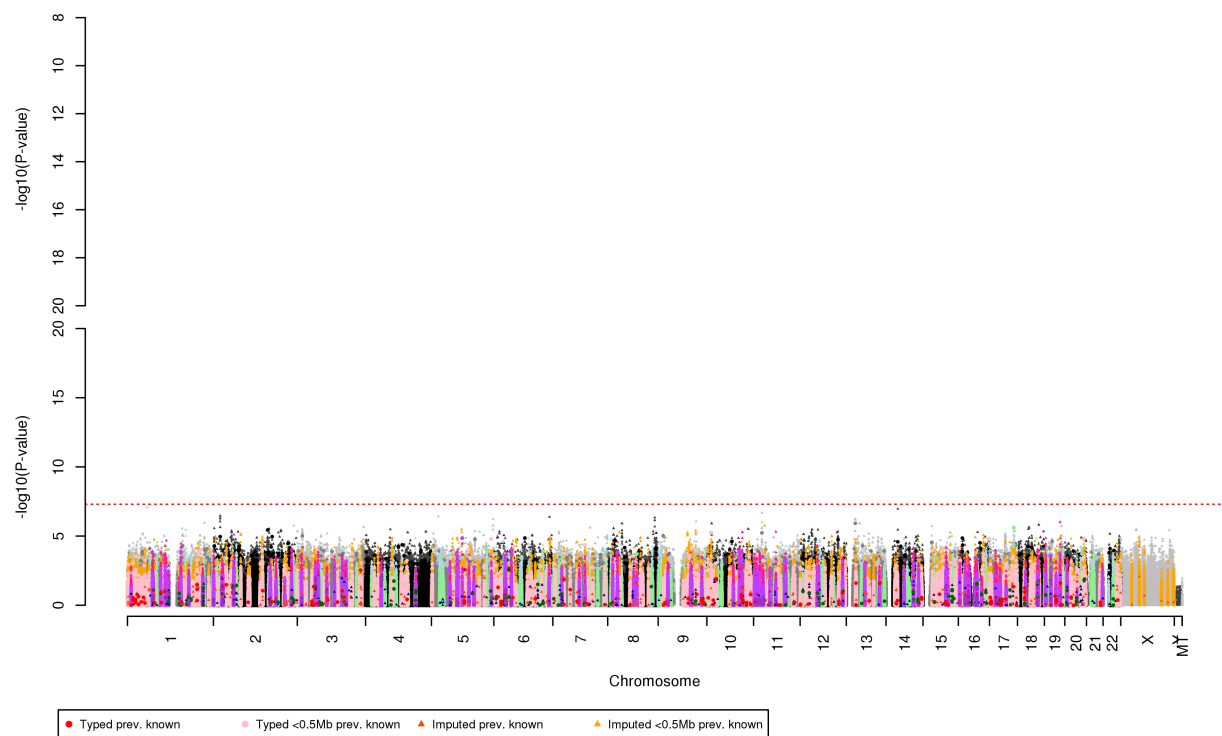
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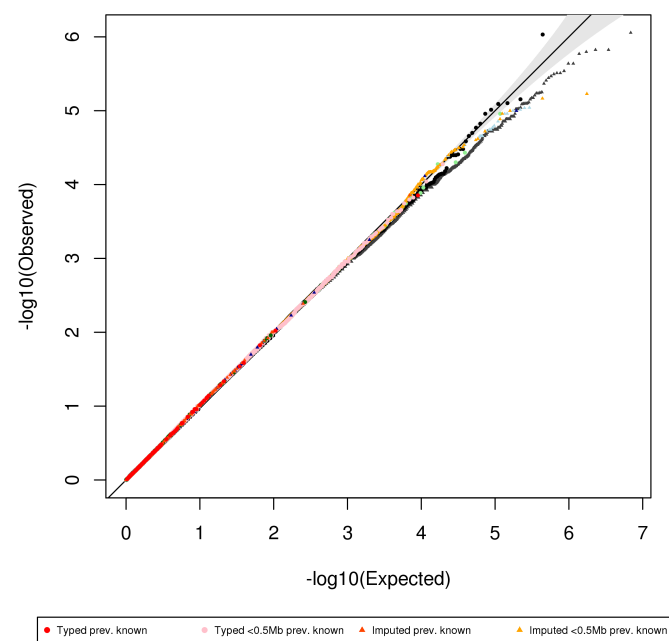
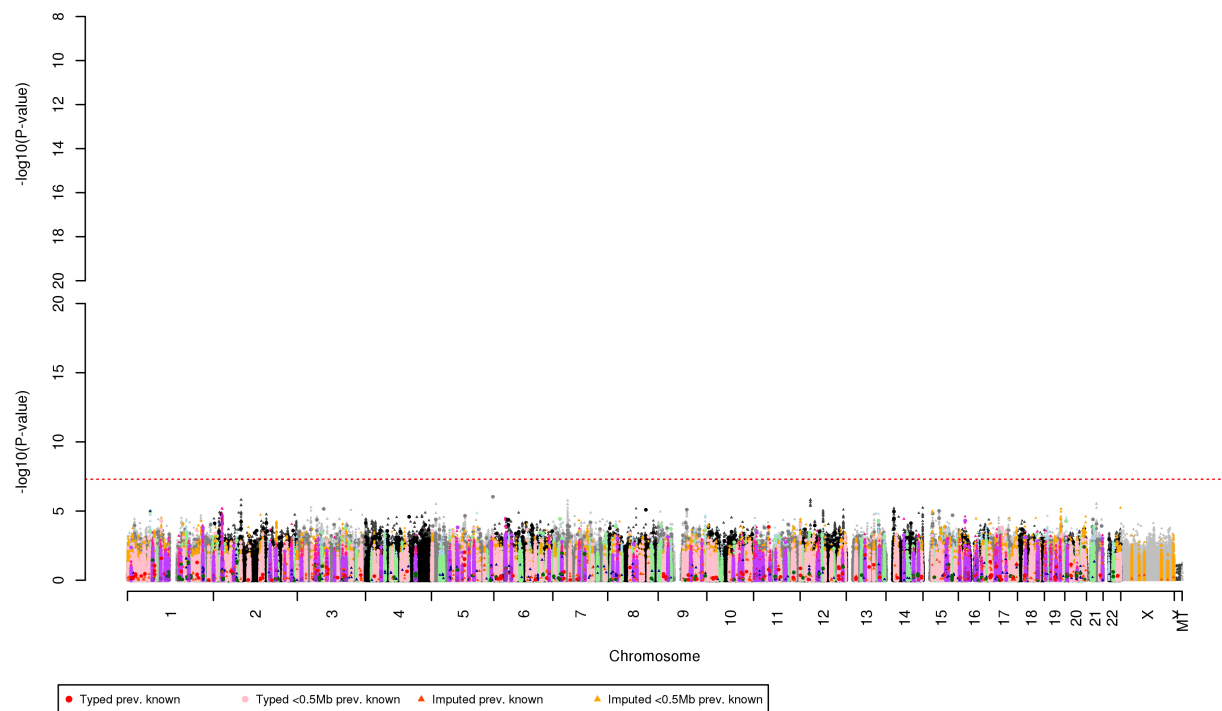
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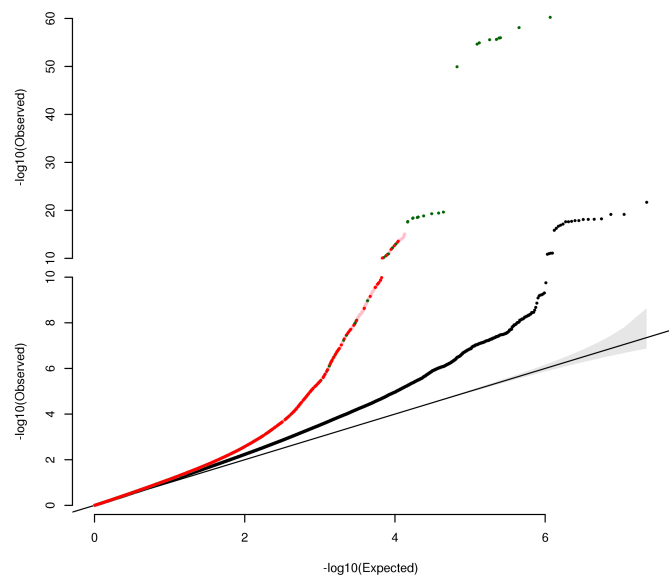
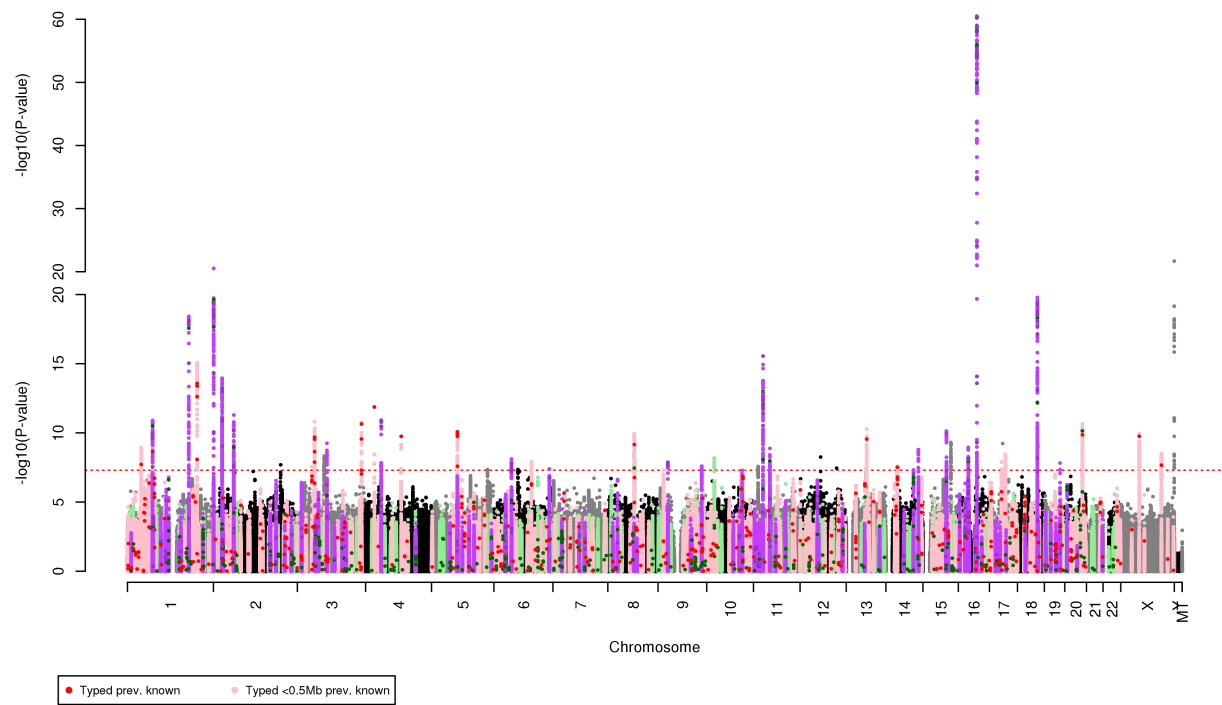
D



E



F



G

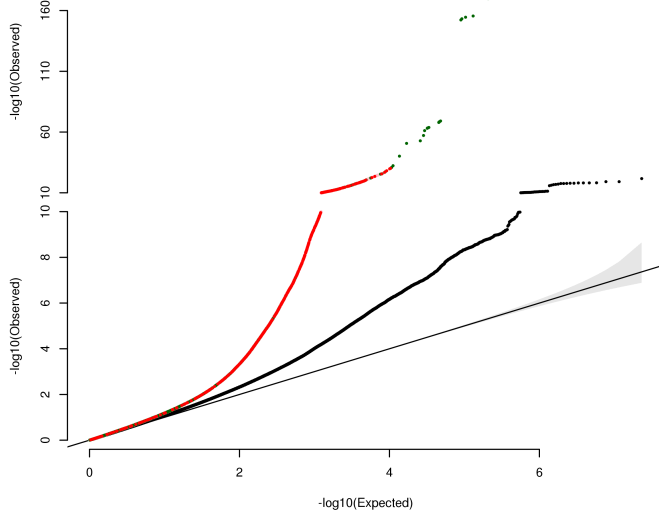


Figure S2. Manhattan plots and Q-Q plots. Plots of each ethnicity, of the GERA meta-analysis, and of the GERA+GIANT meta-analysis. In the ethnicity-specific plots, the triangles are imputed SNPs, whereas the circles are based on the genotyped SNPs; in the meta-analysis all points are imputed. The color coding of the plot is as follows: orange/pink/dark orange/red for BMI imputed +/-0.5Mb of previously-reported BMI variant/typed +/-0.5Mb of variant/actual imputed variant/actual typed variant; light blue/light green/dark blue/dark green for adipose-related trait; magenta/purple/dark magenta/dark purple both a BMI and an adipose-related variant. (A) BMI non-Hispanic whites, $\lambda_{\text{typed}} = 1.20$, $\lambda_{\text{imputed}} = 1.10$; (B) BMI Latinos, $\lambda_{\text{typed}} = 1.10$, $\lambda_{\text{imputed}} = 1.05$; (C) BMI East Asians, $\lambda_{\text{typed}} = 1.05$, $\lambda_{\text{imputed}} = 1.05$; (D) BMI African Americans, $\lambda_{\text{typed}} = 1.00$, $\lambda_{\text{imputed}} = 1.00$; (E) BMI South Asians, $\lambda_{\text{typed}} = 1.00$, $\lambda_{\text{imputed}} = 1.00$; (F) BMI GERA meta-analysis, $\lambda = 1.11$; (G) BMI GERA+GIANT meta-analysis, $\lambda = 1.07$, (Manhattan in main text).

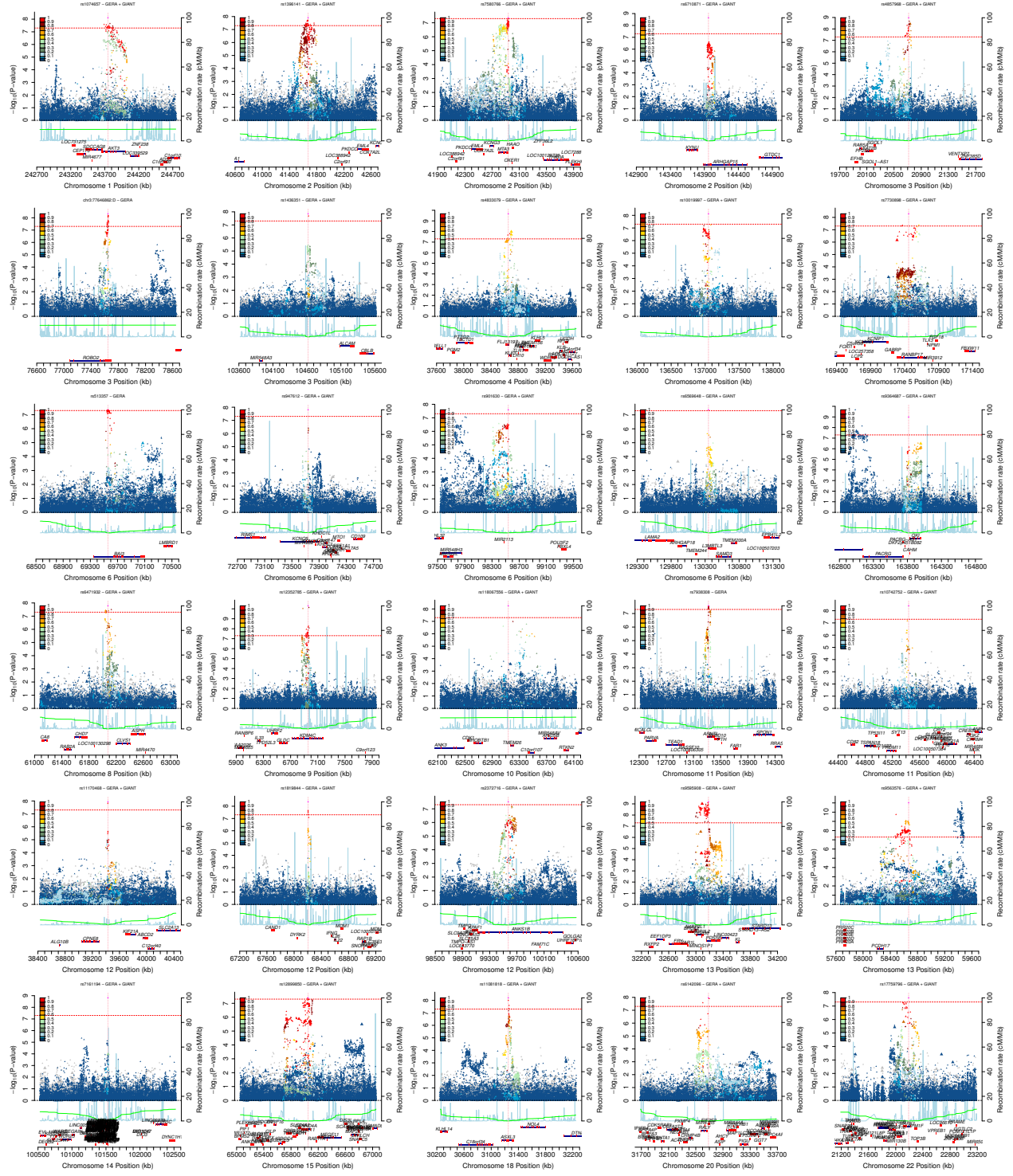


Figure S3. Locus plots.

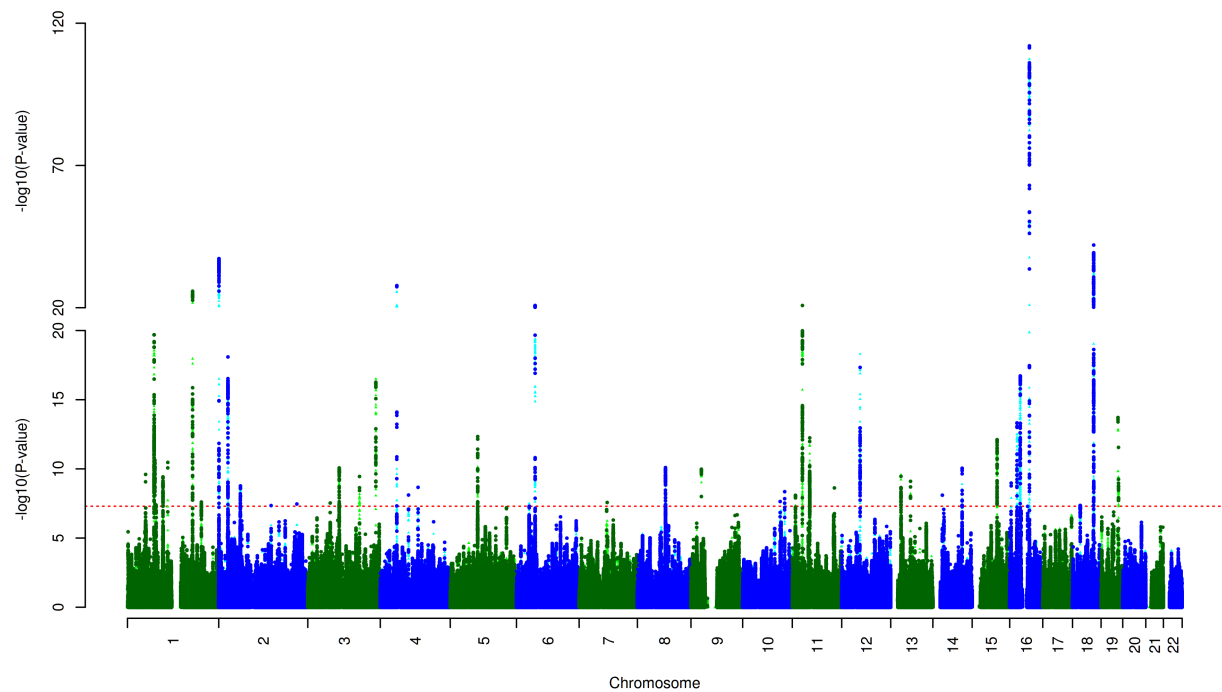


Figure S4. Results from imputing the GIANT summary statistics from Hapmap to 1000 Genomes. Dark green and dark blue points represent the typed markers, and are plotted above the light green and light blue points, which are the imputed markers. There are a few typed markers in chromosome X and Y because they mapped to autosomes in build 36, but to the X and Y chromosomes in build 37.

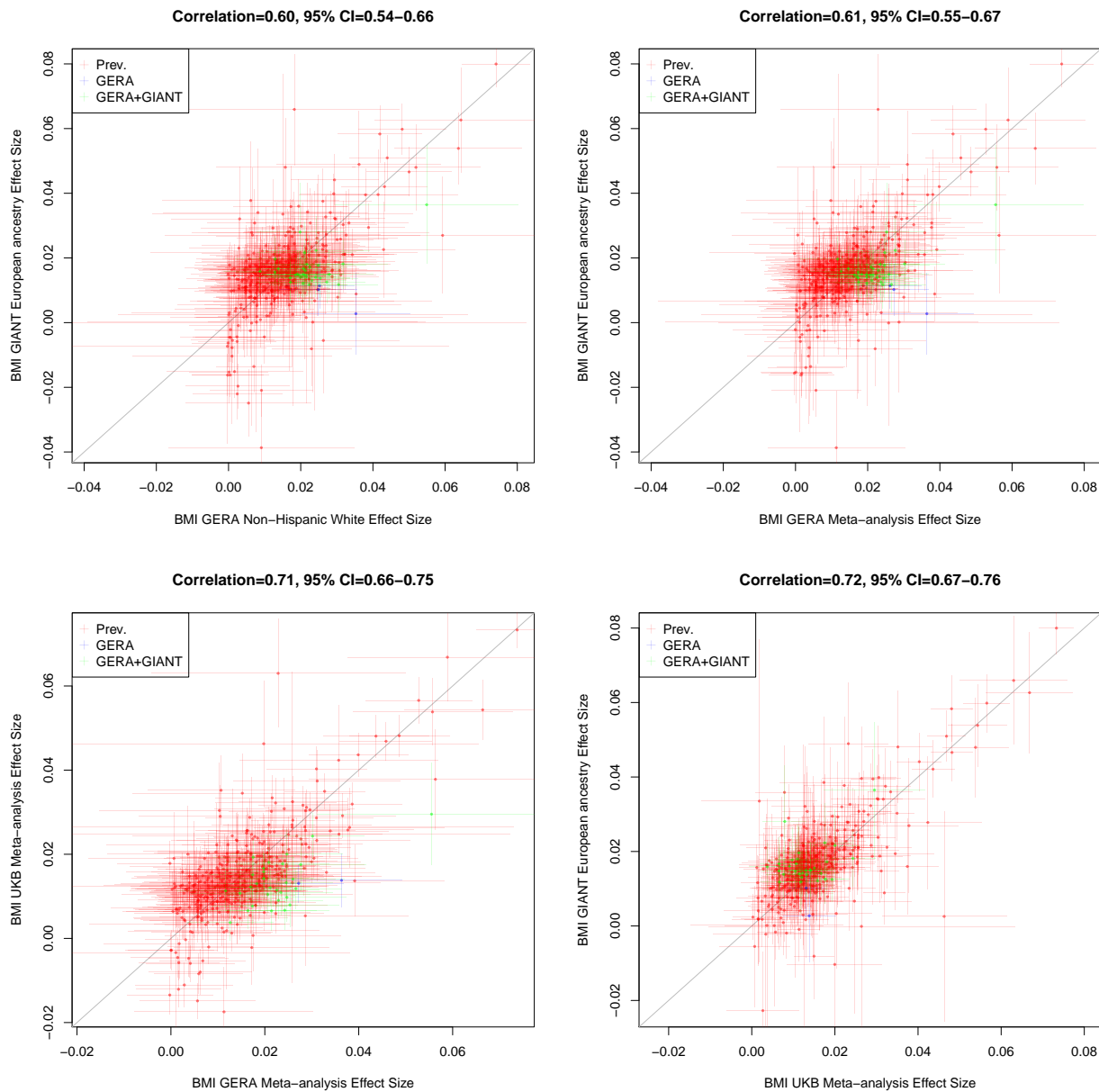


Figure S5. Effect size comparisons amongst GERA, GIANT, and UKB.

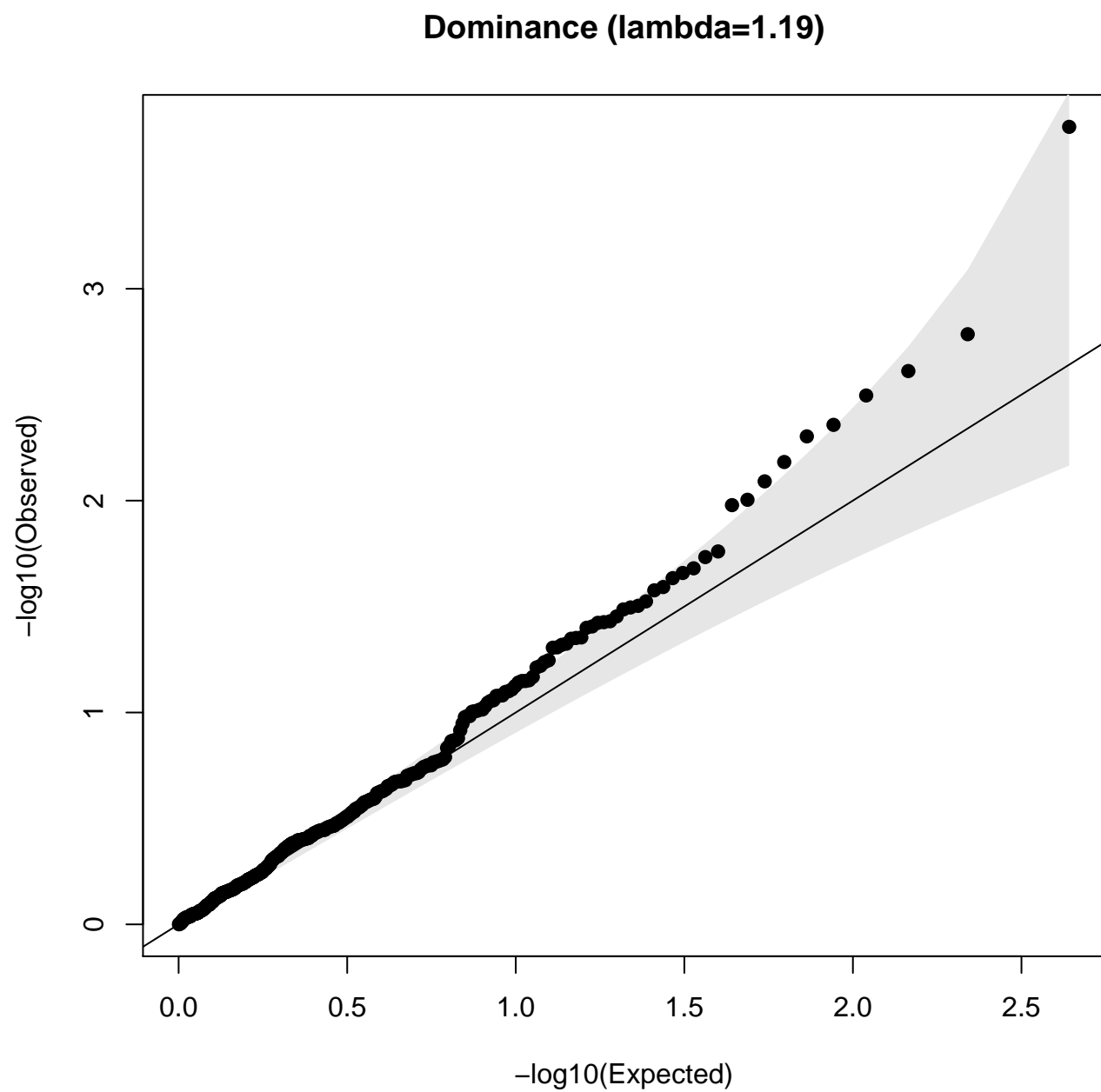


Figure S6. Dominance Q-Q plot of previously- and newly-identified SNPs

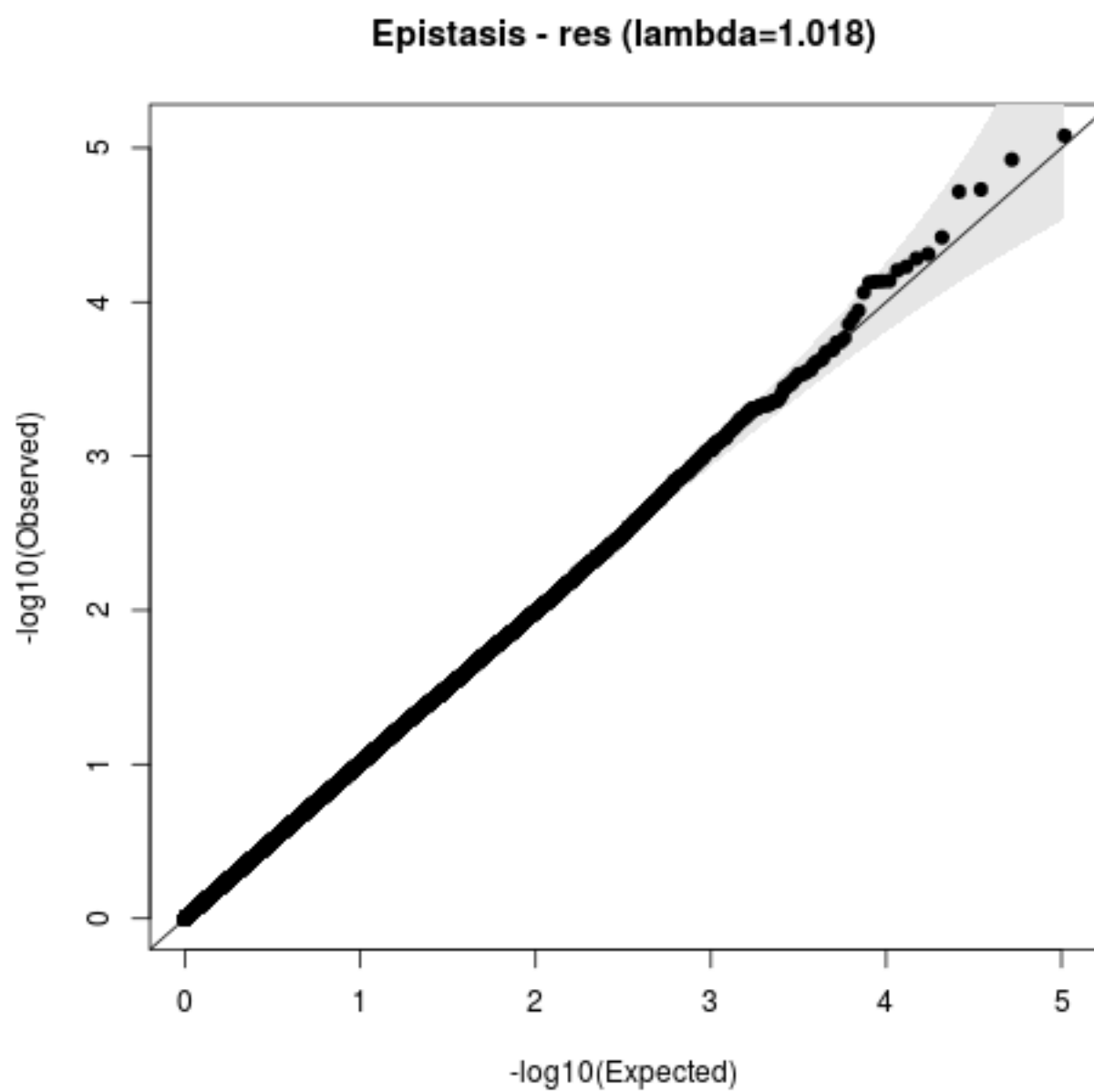


Figure S7. Epistasis Q-Q plot of previously- and newly-identified SNPs

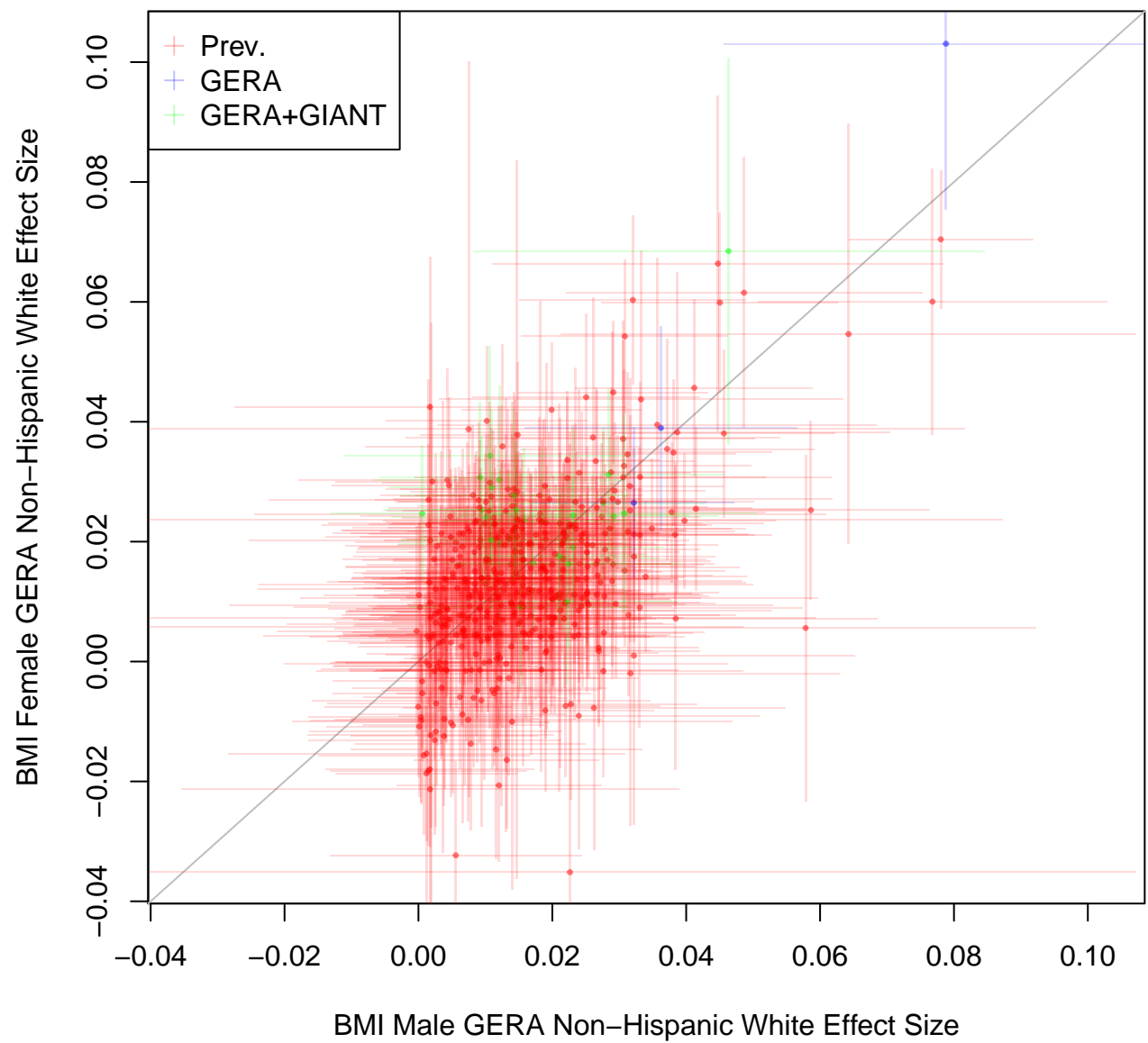


Figure S8. Sex effect size differences

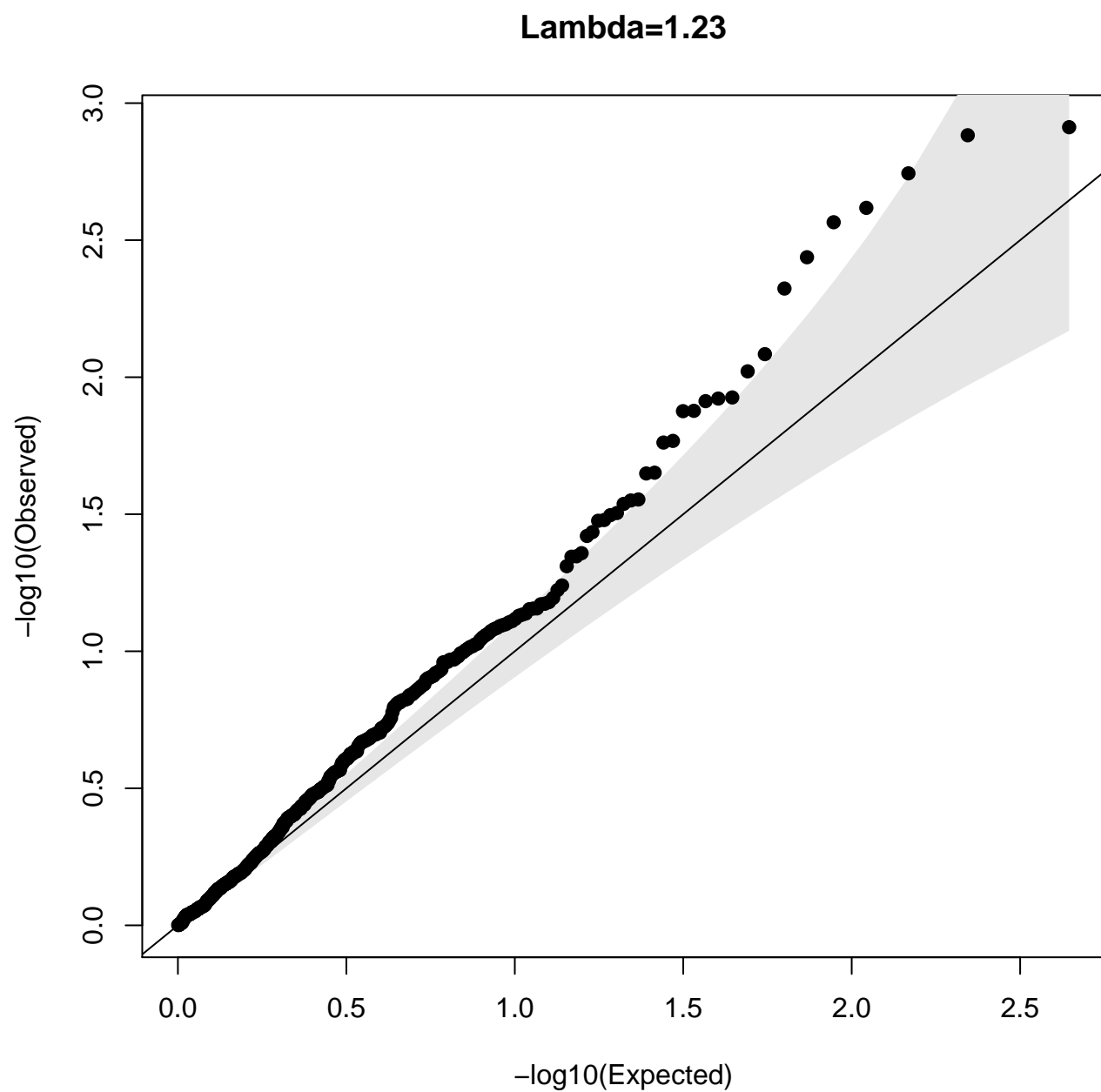


Figure S9. Sex effect size differences Q-Q plot at previously- and newly-identified lead BMI SNPs.

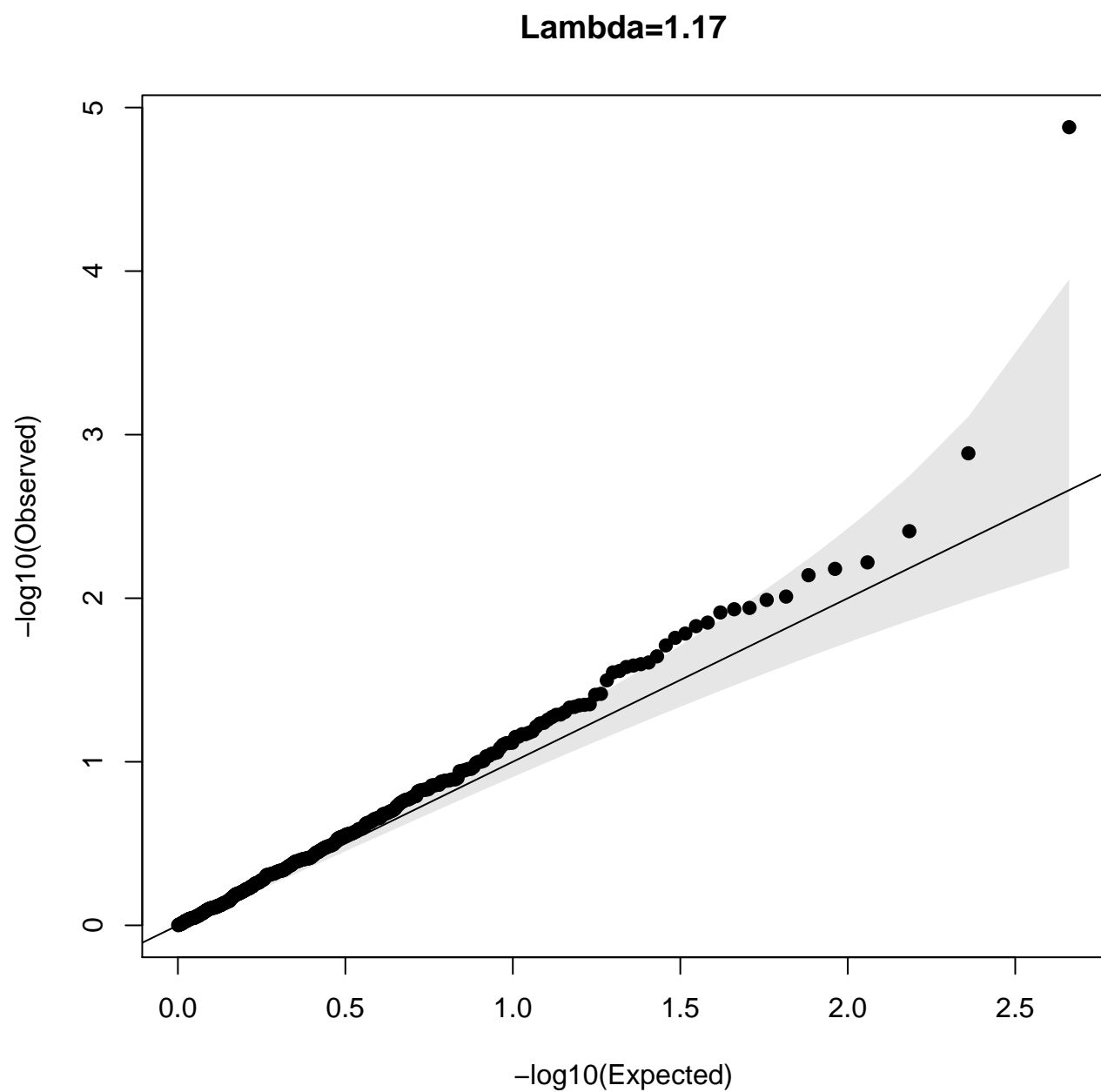


Figure S10. Age (stratified age ≤ 50 and age > 50) differences Q-Q plot at previously- and newly-identified lead BMI SNPs.